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PROPOSALS RELATING TO FOUNDATIONS, HIGH TECHNOLOGY, AND DEPRECIATION

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON
SAVINGS, PENSIONS, AND INVESTMENT POLICY

AND THE

SUBCOMMITTEE ON
TAXATION AND DEBT MANAGEMENT

OF THE

COMMITTEE ON FINANCE
UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

SECOND SESSION

ON

S. 1857 and S. 2165

FEBRUARY 24, 1984

Printed for the use of the Committee on Finance

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PROPOSALS RELATING TO FOUNDATIONS, HIGH TECHNOLOGY, AND DEPRECIATION

FRIDAY, FEBRUARY 24, 1984

U.S. SENATE, SUBCOMMITTEE ON TAXATION AND DEBT MANAGEMENT AND SUBCOMMITTEE ON SAVINGS, PENSIONS, AND INVESTMENT POLICY, OF THE COMMITTEE ON FINANCE,

Washington, DC.

The subcommittees met, pursuant to notice, at 9:40 a.m. in room SD-215, Dirksen Senate Office Building, Senators Durenberger and Chafee (chairmen) presiding.

Present: Senators Chafee, Durenberger, Danforth, Wallop, Bentsen, and Mitchell.

[The press release announcing the hearings, background material on the bills under discussion, and the prepared statements of Senators Chafee and Wallop follow:]

[Press release No. 84-113, January 31, 1984]

FINANCE COMMITTEE SETS HEARING ON FOUNDATIONS, HIGH TECHNOLOGY AND DEPRECIATION PROPOSALS

Senator Bob Packwood, Chairman of the Subcommittee on Taxation and Debt Management, and Senator John Chafee, Chairman of the Subcommittee on Savings, Pensions, and Investment Policy, announced today that a joint hearing will be held on Friday, February 24, 1984, on proposals concerning private foundations and incentives for high technology.

The hearing will begin at 9:30 a.m. in Room SD-215 of the Dirksen Senate Office Building.

The following proposals will be considered:

S. 1857.—S. 1857 is designed to increase the ability of private foundations to receive donations and use their funds for charitable purposes. The bill generally eliminates distinctions in the tax treatment of donors to private foundations and public charities. The bill also eliminates certain restrictions on the activities of donors to private foundations, and changes certain reporting and disclosure obligations of private foundations.

S. 2165.—S. 2165, the High Technology Research and Scientific Education Act of 1983, combines a number of proposals and bills pending in the Senate that deal with tax incentives designed to promote the development of new technology. The bill (1) makes the tax credit for qualified research expenses permanent, and adopts a new separate definition of qualified research for purposes of the credit; (2) adds depreciation as a qualified research expense for purposes of the credit; (3) creates a new credit for university basic research; and (4) makes the credit available for use by start-up companies and joint research ventures. The bill also expands the deduction for corporate donations of scientific equipment to certain post-secondary schools, and sets forth rules governing the exclusion from income of scholarships, grants and student loan forgiveness received by certain graduate students in scientific fields.

Immediately following the joint hearing, the Subcommittee on Taxation and Debt Management will hear testimony on S. 1758, the Accounting Cost Recovery Simplification Act of 1983, introduced by Senator Bentsen for himself and others.

S. 1758.—S. 1758 would generally provide a simplified accelerated cost recovery system. The bill would generally establish an open account system for 3- and 5-year personal property to replace the current asset-by-asset accounting system. In addition the bill would repeal the investment credit adjustment under TEFRA and the recapture provisions of the Internal Revenue Code.

Statement By Senator Dave Durenberger

Mr. Chairman, I am pleased that we are holding this hearing today to consider S. 1857 and I commend you for your longstanding efforts on behalf of philanthropic organizations. I am hopeful that the Senate Finance Committee will include provisions for reform of our foundation tax laws in any tax package that we report this year.

America's private foundations have provided an invaluable service to our nation by supporting important charitable work in communities nationwide. So great has been their support that over $3 billion has been spent annually by private foundations for philanthropic causes. Foundation grants support new approaches to community health, emergency food and shelter for the homeless, housing for the poor, scholarships, medical research, and numerous other charitable activities. Let me just point out several examples of the innovative grants made by foundations in recent years.

Since 1980, the Ford Foundation has given $450,000 to a program administered by the Harlem YMCA addressing the needs of pregnant teenagers from the age of 11 through 17, as well as their families. Project Redirection has also received $70,000 more from the New York Community Trust, the Helena Rubenstein Foundation, and the J.C. Penney Foundation. This program has been so successful that it has become a national model for other efforts. The use of volunteer mentors, called "community women," in this program contributes enormously to its success. These women are residents of the Harlem community and perform and informal advocate role for the young mother and her family. They are on call seven days a week and perform a variety of functions. This total community effort has brought all segments of governmental agencies that never before have related to one another.

In Tampa, Florida, the Conn Foundation has contributed $20,000 over two and a half years in start-up funds to provide after school child care which has already benefitted over 500 young people.

Since 1976, the Charles Stewart Mott Foundation has provided grants totaling $23.3 million for black colleges, youth employment and training and handicapped. In 1982 the Mott Foundation made grants of over $6 million dollars to serve these purposes.

The Commonwealth Fund, in 1982, provided a three-year grant to examine the lives of 2,000 handicapped elementary school children to seek answers to two questions: Do children with specific types of handicapping conditions who attend regular classes do substantially better or worse than children with similar conditions attending special classes? Do children with specific types of handicapping conditions who live in districts that make a relatively large educational investment per handicapped child do substantially better than children with similar conditions living in districts making an average investment?

It is clear that America's foundations have met significant human needs that the Government might be called upon to perform without the initiatives of the private sector. And they have done so utilizing new ideas and incorporating better ways to perform such activities.

In an effort to correct certain abusive practices and ensure that they serve the public interest, Congress enacted comprehensive reform legislation in 1969. While these restrictions with respect to dealings with closely related parties, annual charitable distributions, business holdings, foundation investments and grants, and public reporting have generally been effective, we have discovered, with the passage of time, that we have gone too far. Since enactment of these regulations, foundations have been carefully audited by the IRS and have proven to be in compliance with our tax laws.

Although the private foundation rules have provided an effective framework for foundations' charitable activities, more than a decade of experience has demonstrated that certain aspects of the rules create significant impediments to effective foundation philanthropy.

In order to encourage foundation development and arrest a decline in foundation development, in 1981, we removed a significant unforseen impediment to foundation progress—the "5" percent rules. The time has now arisen for us to take an important step and remove additional impediments to foundation philanthropy.

Senator Moynihan and I have introduced legislation, S. 1857, which would eliminate the discriminatory tax treatment of lifetime gifts to foundations. Since 1969, such gifts have received significantly less favorable tax treatment than similar gifts to other charities. Currently only a part of the value of appreciated property given to a foundation is deductible; if the same property is given to a public charity, the full amount is deductible. In addition, deductions for gifts to foundations are limited to 20 percent of the donor's annual income; considerably higher limits apply to gifts to public charities. Finally, contributions to foundations in excess of the 20 percent limit cannot be carried over for future years; a five-year carryover period applies to excess contributions for public charities.

This discriminatory tax treatment, coupled with other restrictive administrative burdens on foundations rules, have contributed to a two-thirds drop in the birthrate to new foundations since 1969. Our legislation would help reverse this trend by making these gifts deductible on the same basis as gifts to other charities.

Our legislation would also simplify parts of the 1969 legislation by making several technical changes. It would limit the definition of "family member" to the children and grandchildren of substantial contributors and other so-called "disqualified persons," rather than to all lineal descendents of such disqualified persons.

This legislation would allow foundations to rely on official Internal Revenue Service rulings recognizing the tax-qualified status of potential grantees, and ti would apply strict and detailed recordkeeping and reporting requirements only where total grants by a private foundation to a particular grantee during a taxable year exceed $25,000.

Finally, our bill would provide the Secretary of the Treasury with authority to abate first-level penalty rules in cases in which a violation of the private foundation rules is due to good faith error or omission and is corrected within the statutory period.

This legislation has received broad support from many voluntary and non-profit organizations, as evidenced today by the testimony of the Girl Scouts of America, the YMCA, The United Way and Independent Sector. These organizations will all testify to their recognition of the importance of foundations to all non-profit organizations and society as a whole.

Although the House Ways and Means Committee has reported legislation reducing the discriminatory tax treatment of foundations, I do not believe that its legislation goes far enough. The Ways and Means bill, H.R. 4170, represents progress, but is complex and continues discrepancies in tax treatment of foundations and charities. Senator Moynihan and my bill, on the other hand, is far less complicated and will provide greater impetus for foundation development.

I believe S. 1857 represents an important step in supporting the vital role foundations serve in our country and it sets an example to the rest of the private sector. I am hopeful that my colleagues will join me to work toward inclusion of this legislation in the Finance Committee Tax Bill.

STATEMENT OF SENATOR DANFORTH

Mr. Chairman, I am pleased we were able to schedule a heaing on S. 2165 before the Finance Committee completes its deliberations on what will likely be the only tax bill to be reported in 1984.

The credit, under current law, will expire at the end of 1985. Therefore, it is imperative that we act now to extend it. R&D activities are not planned and budgeted for on a quarterly basis. They, by their nature, are long-term investments, and corporations must plan these activities years in advance. Facing uncertainty over whether the credit will exist after 1985, a corporation today cannot make a rational decision on the level of their R&D activitiy in later years.

This country cannot afford to put this type of damper on the R&D efforts of our industries. It is well established that, prior to the enactment of the R&D credit, the decline in U.S. productivity growth over the last decade paralleled the declining pattern of U.S. R&D spending. To survive in world markets where the competition is intense, U.S. industries must continually invest in major research endeavors to develop and apply new technologies and products.

In a similar vein, Mr. Chairman, our colleges' and universities' efforts to maintain quality education in mathematics, engineering and science are being thwarted by a chronic shortage of faculty and a severe lack of up-to-date scientific equipment. For example, there are today over 2,000 vacancies in university engineering faculties. Universities face two problems in attracting qualified faculty. First, they simply don't have the resources to compete with private firms and the salaries they can offer. Second, they face difficulty in attracting high calibar people because of antiquated laboratory facilities.

This bill attempts to alleviate this situation by encouraging greater collaboration between private industry and universities. Under the bill, incentives for private funding of university basic research and acquisition of scientific equipment which exist under current law would be broadened. The Association of American Universities, and other associations of institutions of higher education, agree that these provisions will go a long way toward helping our universities upgrade their ability to provide top flight programs in math, engineering, and sciences.

Mr. Chairman, we will find out this morning what the Administration's position on this will be. I expect it to be generally supportive of the major provisions of the bill. Over the last seven or eight months, my staff, the Treasury Department and industry representatives have worked to reach agreement on various issues, primarily the definition of the type of R&D activities should qualify for the credit. Although we may still have differences in approach, I believe our objectives are the same. I am willing to negotiate further, but I want to make it clear that, whether we reach a compromise or not, I will push to have this bill adopted. I hope a majority of my colleagues will join me.

Statement of Senator Malcolm Wallop

As we begin this hearing this morning on the open accounts legislation introduced last year by Senator Bentsen, I, and several of our Finance Committee colleagues, I would like to make just a few brief comments on our goals in introducing this legislation and some of the possible concerns which remain to be addressed. As a practical matter, our overriding concern was that of simplification. Open accounts does that, and with the repeal of the basis adjustment provisions passed as a part of TEFRA, the present value of depreciation deductions remains relatively the same as it currently stands under the present system. Before we hear from the Treasury Department and the scheduled witnesses there are two points which I would like to make.

The first of these points concerns a fear which I have picked up in conversations with people interested in this legislation. That fear is that if this legislation were to be passed by the Senate there would be considerable pressure from members of the House of Representatives to drop the basis adjustment repeal provisions, while accepting the remainder of the bill. Were that to happen, American business, especially small business, would be in a much worse position than they are under current law. Let me make my intentions with respect to that possible situation clear. I can conceive of no circumstances that would justify my support for such action, and if that looked like a possibility I would work for a commitment from the Chairman of the Committee to drop the open accounts proposal were the basis adjustment repeal to be dropped. Let me stress that it was our intention in introducing this legislation to create a revenue raising measure.

With respect to one of the overriding goals in introducing this legislation, that of simplification, there are provisions of our legislation which I believe must be addressed before that goal is attained. While the bill would eliminate the need for vintage accounting for the purpose of computing depreciation, many of those vintage accounts would nevertheless be required to be maintained for purposes of the investment tax credit and possible ITC recapture. I believe that issue must be addressed if we are going to fulfill our own intent when the legislation was introduced. I am sure the Treasury Department will express some of these same concerns and I look forward to hearing their comments as well as those from other witnesses scheduled to appear before the Committee this morning.

Statement by Senator George Mitchell

Mr. Chairman, I congratulate you for scheduling a hearing on S. 2165, the High Technology Research and Scientific Education Act. I hope that this hearing will be followed by prompt action by the Finance Committee.

Maintaining and improving our world leadership in technology is an objective that enjoys bipartisan support. Anyone who examines the economic challenges facing the U.S. will conclude that steps must be taken to enhance our economy's capacity to innovate. Essential to any comprehensive program aimed at advancing American research and development capabilities is conforming the tax code to reflect the unique concerns of innovative companies.

S. 2165 acknowledges the importance of both businesses and universities in the innovation process. By improving and making permanent the R&D tax credit, the bill should improve the effectiveness of the credit by giving research-intensive businesses greater certainty on the long-term availability of this incentive. In addition, the proposed credit for business contributions to universities should provide much needed financial support for basic research.

The bill also modifies the tax incentive for the donation of scientific and technical equipment to universities. I am pleased to have played a role in the enactment of the existing provision. In 1981, Representative Shannon and I introduced the special deduction, which was incorporated in the Economic Recovery Tax Act of 1981. The improvements included in S. 2165 will enable the equipment donation incentive to improve both the education of science students and the research done at universities.

While I recognize, Mr. Chairman, that tax proposals constitute only one part of an overall program to bolster U.S. research and development efforts, I believe that enactment of S. 2165 should be a high priority. I hope the short legislative schedule this year will not prevent us from moving quickly on this legislation.

DESCRIPTION OF S. 1758

RELATING TO

SIMPLIFIED COST RECOVERY SYSTEM FOR PERSONAL PROPERTY

SCHEDULED FOR A HEARING

BEFORE THE

SUBCOMMITTEE ON
TAXATION AND DEBT MANAGEMENT

OF THE

SENATE COMMITTEE ON FINANCE

ON FEBRUARY 24, 1984

PREPARED BY THE STAFF

OF THE

JOINT COMMITTEE ON TAXATION

INTRODUCTION

The Subcommittee on Taxation and Debt Management of the Senate Committee on Finance has scheduled a public hearing on February 24, 1984, on S. 1758 (introduced by Senators Bentsen, Wallop, Symms, Bradley, Grassley, Mitchell, Durenberger, Baucus, Matsunaga, and Roth). The bill relates to a simplified cost recovery system for personal property.

The first part of the pamphlet is a summary. This is followed in the second part with a description of S. 1758, including present law, explanation of provisions, and effective dates.

I. SUMMARY

S. 1758—Senators Bentsen, Wallop, Symms, Bradley, Grassley, Mitchell, Durenberger, Baucus, Matsunaga and Roth

Simplified Cost Recovery System for Personal Property

Present Law

Under present law, the cost of most tangible personal property (other than long-lived public utility property) placed in service after 1980 may be written off over 3 years or 5 years under the Accelerated Cost Recovery System (ACRS). Recovery schedules are provided which approximate the benefits of using the 150-percent declining balance method in the early years and the straight-line method in later years. Unless the taxpayer elects a reduced investment tax credit for the property, the cost that may be written off is decreased by one-half the amount of the credit for which the property qualifies.

Recovery of progress expenditures made during the period of construction does not begin until the property is placed in service. Gain from the disposition of personal property is recaptured as ordinary income to the extent of prior recovery deductions taken. For purposes of earnings and profits, depreciation of property in the 3-year and 5-year classes is generally computed by using the straight-line method over 5 and 12 years, respectively.

S. 1758

Under the bill, an open-ended accounting method of cost recovery would apply to property, other than public utility property, that is treated under present ACRS rules as 3-year or 5-year property. Unlike current procedures under ACRS, where a separate account may be established for each item of property, property subject to the bill would be pooled using a much smaller number of accounts. An open-ended accounting method is available for income tax purposes in certain other countries, including Canada, Denmark and Hong Kong.

The present basis adjustment, and the reduced credits which apply in lieu of basis adjustment, would be repealed for property subject to the new system. The combined effect of open-ended accounts and no basis adjustment would be to keep the present value of the economic benefit of cost recovery for purchased assets very nearly the same as under present ACRS rules, assuming in both cases that the taxpayer chooses the most accelerated options for recovery.

Cost recovery for qualified progress expenditures would start when the expenditures are made, if the asset would be depreciated under the new system when placed in service. The new system would generally eliminate determination of gain and recapture on the disposition of assets and would modify the computation of depreciation for purposes of determining earnings and profits.

II. DESCRIPTION OF S. 1758

A. Present Law

Overview

The cost of most tangible personal property (other than long-lived public utility property) placed in service after 1980 may be written off over 3 years or 5 years under the Accelerated Cost Recovery System (ACRS). Recovery schedules are provided which approximate the benefits of using the 150-percent declining balance method in the early years and the straight-line method in later years. Unless the taxpayer elects a reduced investment tax credit for the property, the cost that may be written off is decreased by one-half the amount of the credit for which the property qualifies.

Recovery of progress expenditures made during the period of construction does not begin until the property is placed in service. Gain from the disposition of personal property is recaptured as ordinary income to the extent of prior recovery deductions taken. For purposes of earnings and profits, depreciation of property in the 3-year and 5-year classes is generally computed by using the straight-line method over 5 and 12 years, respectively.

Cost recovery under ACRS

General rules

The cost of most tangible personal property placed in service after 1980 is written off under ACRS (Code sec. 168). Under ACRS, each item of personal property is assigned to one of four recovery classes. For each class, ACRS provides both a recovery period, the number of years over which costs may be written off, and a schedule of recovery percentages.

The recovery percentages approximate the benefits of using the 150-percent declining balance method (with a half-year convention) in the early years of the recovery period and the straight-line method in the later years. The recovery deduction for an asset is computed by multiplying the cost of the property times the appropriate recovery percentage. For this purpose, cost is first decreased by one-half the amount of investment credit for the property ("basis adjustment"), unless the taxpayer elects to take a reduced credit (sec. 48(q)).

Present law provides certain options for, and restrictions on, the use of ACRS as it is summarized above.

3-year property

Automobiles, light-duty trucks, certain special tools, personal property used in connection with research and experimentation, and other short-lived property are assigned to the 3-year class. The recovery period for this class is 3 years, and recovery percentages are 25 percent for the first year, 38 percent for the second year, and 37 percent for the third year. The investment credit for qualifying property in the 3-year class is 6 percent, unless the taxpayer elects a 4-percent credit in lieu of basis adjustment.

To illustrate the operation of ACRS and basis reduction for assets in the 3-year class, assume that a calendar-year taxpayer places a $100 asset in service in 1984 and that the asset qualifies for the investment credit. The amount of the credit would be $6, available in 1984. The basis adjustment would be $3, which leaves $97 to be recovered. If the taxpayer continues to use the asset at least through 1986, recovery deductions would be $24.25 for 1984, $36.86 for 1985, and $35.89 for 1986.

5-year property

Personal property which is not in the 3-year class and is not long-lived public utility property is, with certain limited exceptions, assigned to the 5-year class. (Long-lived public utility property is assigned to the 10-year class or 15-year public utility class under ACRS.) Also, certain single-purpose agricultural and horticultural structures and certain petroleum storage facilities are included in the 5-year class.

The recovery period for property in this class is 5 years, and the recovery percentages are 15 percent for the first year, 22 percent for the second year, and 21 percent for each of the three following years. The investment credit for qualifying property in the 5-year class is 10 percent, unless the taxpayer elects an 8-percent credit in lieu of basis adjustment.

Progress expenditures

Generally, investment credits are claimed for the taxable year in which qualifying property is placed in service. However, in certain cases where property is constructed over a period of two or more years, an election is provided under which the credit may be claimed on the basis of progress expenditures made during the period of construction before the property is completed and placed in service (sec. 46(d)). In any case, cost recovery of progress expenditures does not begin until the property is placed in service.

Disposition of assets and recapture

Gain or loss is generally recognized on each disposition of an asset, including retirements from service, unless other provisions of the Code provide for nonrecognition. Gain from the disposition of depreciable personal property is recaptured as ordinary income to the extent of prior recovery deductions taken for the property (sec. 1245). For this purpose, the amount of any basis adjustment for investment credits is treated as a cost recovery deduction, except to the extent there is any investment credit recapture. Gain in excess of recovery deductions taken may be treated as a capital gain under section 1231 (unless the gain is offset by losses on sec. 1231 assets).

Earnings and profits

A corporate distribution with respect to the corporation's stock is generally taxable as a dividend only if it is made out of the corporation's current or accumulated earnings and profits. The computation of earnings and profits is similar to the computation of taxable income, as modified by certain adjustments and special rules.

Under one of these special rules, depreciation for earnings and profits is generally computed by using the straight-line method over 5 years for 3-year property and over 12 years for 5-year property (sec. 312(k)).

B. Explanation of the Bill

Overview

An open-ended accounting method of cost recovery would apply to property, other than public utility property, that is treated under present ACRS rules as 3-year or 5-year property. The present basis adjustment and the reduced credits which apply in lieu of basis adjustment would be repealed for property subject to the new system.

Cost recovery for qualified progress expenditures would start when the expenditures are made, if the asset would be depreciated under the new system when placed in service. The new system would generally eliminate determination of gain and recapture on the disposition of assets and would modify the computation of depreciation for earnings and profits.

Cost recovery under open-ended accounts

General rules

In general, an open-ended accounting method of cost recovery would apply to property (referred to as post-1983 recovery property) that is placed in service after 1983 and is treated under present ACRS rules as 3-year or 5-year property.[1] However, this recovery method would not apply to any public utility property, the costs of which would be recovered under present rules. The bill would repeal the present basis adjustment and the reduced investment credits in lieu of basis adjustment for post-1983 recovery property.

Post-1983 recovery property would be assigned to one of two categories (referred to as category 1 and category 2). For each category, there would be one open-ended recovery account and a recovery percentage selected, within limits, by the taxpayer.

Unlike current procedures under ACRS, where a separate account may be established for each item of property, the costs of all property in the same category would be placed in the same recovery account, regardless of the year of acquisition. This would be done according to a half-year convention, under which one-half the cost of an asset is added in the taxable year it is placed in service and the remaining half is added in the subsequent taxable year. An account balance would be reduced by the amounts realized (fair market value, in the case of certain transfers other than a sale) on disposition of assets which had been assigned to the account. The recovery deduction for an account would be computed by multiplying the account balance at the close of a taxable year times the appropriate recovery percentage. This deduction would be subtracted from the account to determine the opening balance in the account for the following year.

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[1] The bill, as introduced, was prepared for consideration in 1983. Therefore, the bill is described in this pamphlet as if the effective dates were one year later than the effective dates which are in the introduced bill. The latter dates are described in the section below ("Effective Date").

For each taxable year, a taxpayer would elect a separate recovery percentage, within limits, to apply to each recovery account. The permissible recovery percentages would reflect the benefits of continually using a declining balance method, not more rapid than 150 percent and not less rapid than 75 percent, and assuming a recovery period of 3 years for property in category 1 and 5 years for property in category 2. Technically, this would mean that the cost of an asset would never be completely written off. However, for a broad range of discount rates, the present value of the economic benefit of cost recovery for purchased assets (using the highest permissible recovery percentage in either recovery account) would be very nearly the same as cost recovery under present ACRS rules, taking into account the investment credit in each case.

In sum, a taxpayer would maintain only two accounts for property covered by the bill, rather than the more numerous asset-by-asset accounts under ACRS. This open-ended accounting method is available for income tax purposes in certain other countries, including Canada, Denmark and Hong Kong.

Category 1

Property that is assigned to the 3-year class under present ACRS rules, excluding public utility property, would be assigned to category 1. The recovery percentage that a taxpayer could select for the corresponding open-ended recovery account could be no greater than 50 percent and no smaller than 25 percent for any taxable year. The investment credit for qualifying property in category 1 would generally continue to be 6 percent, as under present law. However, the bill would allow a taxpayer to elect to place in category 2 any item of post-1983 recovery property that would otherwise be in category 1. The investment credit for qualifying property for which this election is made would be 10 percent.

To illustrate the operation of the open-ended system for assets in category 1, assume that a calendar-year taxpayer places a single $100 asset in service in 1984, that the taxpayer elects 50 percent as the recovery percentage in every year, that the asset qualifies for the investment credit, and that the taxpayer acquires no additional assets. The amount of the credit would be $6, available in 1984. The amounts added to the corresponding recovery account under the half-year convention would be $50 in 1984 and $50 in 1985. The recovery deduction for 1984 would be $25 (50 percent times the closing balance of $50). The 1985 closing balance would be $75 (the 1985 opening balance of $25 plus $50 of acquisition cost under the half-year convention) and the cost recovery deduction for 1985 would be $37.50. If the taxpayer continues to use the asset beyond 1985, the recovery deduction for a particular year would be one-half as great as the recovery deduction in the preceding year.

Category 2

Property that is assigned to the 5-year class under present ACRS rules, excluding public utility property, would be assigned to category 2. The recovery percentages that a taxpayer could select for the corresponding open-ended recovery account could be no greater than 30 percent and no smaller than 15 percent for any taxable year. The investment credit for qualifying property in category 2 would be 10 percent. This would be the same credit as under present law, except for category-1 property which the taxpayer elects to treat as category-2 property (discussed above).

Progress expenditures

Cost recovery for qualified progress expenditures would start in the taxable year the expenditures are made (using the half-year convention provided by the bill), if the completed asset would be post-1983 recovery property when placed in service. The cost of the asset placed in service would be added to a recovery account only to the extent it exceeds progress expenditures for the asset which were previously taken into account.

Disposition of assets and recapture

Under the open-ended account system, gains and losses on the disposition of assets would generally be deferred. Instead of immediate gain or loss recognition, the amount realized would reduce the appropriate account balance which, in turn, would reduce the amount of recovery deductions in the year of the disposition and in subsequent years. If the amount realized reduces the account balance to a negative amount, such amount would generally be treated as a capital gain under section 1231, and section 1245 recapture would not apply. The amount so treated would be reduced to the extent of one-half of the depreciable bases of assets placed in service (or qualified progress expenditures made) during the taxable year. No reduction in the balance of a recovery account would be made by reason of a transfer at death.

In general, the fair market value of an asset would be subtracted from the appropriate recovery account in the case of transfers other than a sale. Property which ceases to qualify for cost recovery, such as property which is converted to personal use, would be treated as disposed of at fair market value.

The bill would provide special rules for the treatment of like-kind exchanges, involuntary conversions, and certain transactions in which basis carries over. In the case of like-kind exchanges or involuntary conversions where the properties were assigned to the same recovery account, no changes would be made to the account unless additional consideration in the form of money or other nonqualifying property were involved. Where such additional consideration is involved or the properties exchanged were assigned to different recovery accounts, adjustments would be made in accordance with regulations to be prescribed by the Treasury Department. In a disposition in which post-1983 recovery property is transferred and the transferee's basis is determined by reference to the adjusted basis of the transferor, the transferor's recovery account would generally be reduced by an amount which bears the same ratio to the account balance as the fair market value of the transferred property bears to the fair market value of all assets (including the transferred property) in the account. The transferee's basis in the transferred property would be the amount by which the transferor's account was reduced.

Earnings and profits

In the case of post-1983 recovery property, earnings and profits would be computed in the same way as recovery deductions, except that recovery percentages of 25 percent for the category-1 recovery account and 15 percent for the category-2 account would be used in every taxable year. Two separate accounts would be maintained for this purpose.

C. Effective Dates

In general, the provisions of the bill, as introduced, would apply to property placed in service by the taxpayer after December 31, 1982, in taxable years ending after that date. The provisions relating to qualified progress expenditures would apply to expenditures made by the taxpayer after December 31, 1985, in taxable years ending after that date.

DESCRIPTION OF TAX BILLS
(S. 1857 and S. 2165)

SCHEDULED FOR A JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON
TAXATION AND DEBT MANAGEMENT

AND THE

SUBCOMMITTEE ON SAVINGS,
PENSIONS, AND INVESTMENT POLICY

OF THE

COMMITTEE ON FINANCE

ON FEBRUARY 24, 1984

INTRODUCTION

The bills described in this pamphlet have been scheduled for a joint hearing on February 24, 1984, before the Senate Finance Subcommittees on Taxation and Debt Management and on Savings, Pensions, and Investment Policy.

The two bills scheduled for the hearing are S. 1857 (liberalize charitable deduction rules for private nonoperating foundations; amendments to foundation excise tax provisions) and S. 2165 ("High Technology Research and Scientific Education Act").

The first part of the pamphlet is a summary of the bills. This is followed in the second part by a more detailed description of the bills, including present law, explanation of provisions, and effective dates.

I. SUMMARY

1. S. 1857—Senators Durenberger, Moynihan, Bradley, Matsunaga, Lugar, Packwood, Tsongas, D'Amato, Riegle, and Heinz

Liberalize Charitable Deduction Rules for Private Nonoperating Foundations; Amendments to Foundation Excise Tax Provisions

Liberalizing charitable deduction rules

The bill would conform the income tax treatment of contributions by individuals to private nonoperating (grantmaking) foundations to that provided under present law for contributions by individuals to public charities or private operating foundations (Code sec. 170), effective for contributions made after 1982.

Under the bill, contributions of cash or ordinary-income property to private nonoperating foundations would be deductible up to 50 percent of the donor's adjusted gross income, and contributions of capital-gain property, up to 30 percent, rather than up to 20 percent as under present law. Also, excess contributions to nonoperating foundations could be carried forward for five years. Finally, the full fair market value of capital-gain property donated to nonoperating foundations generally would be deductible; under present law, the amount deductible equals the fair market value reduced by 40 percent of the unrealized appreciation.

Narrowing definition of family members

Present law contains a number of restrictions imposed on private foundations which depend on determinations of "disqualified persons." This term includes a substantial contributor, a foundation manager, or a member of the family of such individuals (sec. 4946). A member of the family includes the spouse, ancestors, and lineal descendants (and spouses of lineal descendants) of the individual.

The bill would narrow the category of disqualified persons by limiting family members to the spouse, ancestors, children, and grandchildren (and the spouses of children and grandchildren) of the substantial contributor, etc., effective January 1, 1983.

Increasing reliance on IRS classification of donee organizations

Under present law, Treasury regulations and IRS rulings establish guidelines under which a private foundation may rely on an IRS classification of a donee organization as a public charity or private operating foundation.

The bill would provide that a grant (made after 1982) to an organization which the IRS has determined to be a public charity (or private operating foundation) would be treated as a grant to such an organization, even though the donee organization loses such status, if (1) the grant was made prior to the earlier of the date of publication by the IRS that the donee organization has lost its qualified status, or the date on which the foundation acquires actual knowledge that the donee organization has been notified by the IRS of loss of its qualified status, and (2) the donor foundation was not responsible for (other than by making grants) or aware of the change in the donee's status.

Exemption from expenditure responsibility requirements

Under present law, a private foundation must exercise "expenditure responsibility" over grants to organizations other than public charities. In order to ensure that such grants will be properly used by the recipient for charitable purposes, the grantor must make reasonable efforts, and establish adequate procedures, to see that the grant is spent solely for proper uses, to obtain full reports from the grantee, and to make full reports to the IRS on the grants (sec. 4945(h)).

The bill would provide that a private foundation is not required to exercise expenditure responsibility over a grant (made after 1982) to an organization if the aggregate amount of grants made during the taxable year by the foundation (and all related foundations) to that organization does not exceed $25,000.

Abatement of first-tier excise taxes

Under present law, any violation of the foundation rules results in imposition of an initial excise tax on the foundation (or in the case of self-dealing, on the disqualified person who entered into the prohibited transaction with the foundation). In general, this first-tier tax applies automatically when a foundation rule is violated.

The bill would waive the first-tier excise tax imposed under sections 4941-4945 on the foundation (or disqualified person, in the case of self-dealing) if the IRS determines that the violation (1) was due to reasonable cause and not to intentional disregard of rules and regulations, and (2) the violation is "corrected" with the specified period. This provision would apply to post-1982 taxable years.

2. S. 2165—Senators Danforth, Bentsen, Chafee, Mitchell, Symms, Packwood, Wilson, Tsongas, Wallop, Pell, Dodd, and Bingaman

"High Technology Research and Scientific Education Act"

a. Extension of credit for increased research expenditures; modification of qualified research definition; equipment depreciation under credit, ACRS provisions; modification of trade or business requirement

Present law

An income tax credit is allowed for certain qualified research expenditures incurred in carrying on a trade or business (Code sec. 44F, enacted in ERTA). The credit applies only to the extent that the taxpayer's qualified research expenditures for the taxable year exceed the average amount of yearly qualified research expenditures in a specified base period (generally, the preceding three taxable years). The rate of the credit is 25 percent of the incremental research expenditure amount.

For purposes of the section 44F credit, the definition of research is the same as that used for purposes of the special deduction rules under section 174, but subject to certain exclusions. (Treasury regulations define qualifying expenditures under section 174 as "research and development costs in the experimental or laboratory sense.") A taxpayer's research expenditures eligible for the section 44F incremental credit consist of (1) "in-house" expenditures by the taxpayer for research wages and supplies used in research, plus certain amounts paid for research use of laboratory equipment, computers, or other personal property; (2) 65 percent of amounts paid by the taxpayer for contract research conducted on the taxpayer's behalf; and (3) if the taxpayer is a corporation, 65 percent of the taxpayer's expenditures (including grants or contributions) pursuant to a written research agreement for basic research to be performed by universities or certain scientific research organizations.

Cost-recovery (depreciation) allowances on research equipment are not eligible for the section 44F credit, but are deductible under section 174. The cost of research equipment is recoverable over three years; such equipment is also eligible for a six-percent investment tax credit.

Under present law, the section 44F credit will not apply to research expenditures after December 31, 1985.

Title I of the bill

Extension of credit.—The bill would make permanent the section 44F credit for increased research expenditures.

Research definition.—The bill would provide a separate, statutory definition of qualified research for purposes of the credit, effective for post-1983 taxable years. This definition would not affect the category of research expenditures qualifying for the section 174 deduction.

Under the bill, only expenditures to develop new or significantly improved business items (including costs of the design, construction, and testing of prototypes, models, and pilot plants) would qualify for the credit. To meet this test, the business item must be developed by a process of experimentation, and the performance or cost aspects of the new or improved characteristics must outweigh the stylistic, cosmetic, or seasonal design aspects. Under a special rule in the bill, computer software that is separately developed by the taxpayer solely for its own internal use could qualify as a business item only if used in (1) qualified research undertaken by the taxpayer, (2) a production process, or (3) the performance for customers of services of which such software together with the corresponding hardware is the predominant component, or otherwise to the extent allowed by Treasury regulations.

Depreciation.—The bill would add cost-recovery allowances on tangible personal property used in the conduct of qualified research to the categories of research expenditures which are eligible for the section 44F credit. Where a taxpayer pays others to do research for it, the percentage of contract payments eligible for the credit would be increased from 65 to 75 percent. These changes would be effective for post-1983 taxable years.

In addition, the bill would provide that the cost of research equipment—which now is recoverable over three years, with a six percent investment tax credit—would be recoverable over five years, with a ten percent investment credit. This provision would apply to property placed in service in post-1983 taxable years.

Trade or business test.—The bill would in effect repeal the trade or business requirement of present law for most corporations. As a result, research expenditures of start-up corporations would be eligible for the credit, as would expenditures of established corporations incurred in research endeavors that are not directly related to their existing trades or businesses. With respect to research expenses of a partnership, the bill would provide that the trade or business test used to determine whether such expenses qualify for the credit is to be applied at the partnership level, without regard to the trade or business of any partner. This rule would be modified for certain corporate and other joint ventures.

b. Increased credit for corporate support of basic research at universities

Present law

Under present law, corporations may take into account, for purposes of computing the section 44F credit for a taxable year, 65 percent of university basic research expenditures for that year; similarly, this percentage amount is treated as qualified research expenditures in a base period year when the corporation calculates the credit in subsequent years. If any basic research payment made during a year is attributable to research to be conducted by the university in a later year, that amount is treated, pursuant to a prepayment limitation rule in present law, as paid in the year or years when the research is actually conducted.

This special rule for basic research applies only to corporate expenditures (including grants or contributions) paid or incurred pursuant to a written research agreement between the taxpayer corporation and a college or university, certain tax-exempt scientific research organizations, or certain qualified funds.

Section 201 of the bill

The bill would provide more favorable tax treatment for corporate expenditures (including grants or contributions) for basic research performed at universities or at certain scientific research organizations, by (1) increasing, from 65 to 75 percent, the percentage of such expenditures which are eligible for a credit; (2) applying a new 25-percent credit to the excess of the percentage amount over a fixed floor based on 1981-83 expenditures, rather than over a moving base period average; and (3) making the prepayment limitation of present law inapplicable to such expenditures.

The new 25-percent credit, effective for taxable years beginning after 1983, would apply to the excess of (1) 75 percent of qualifying university basic research expenditures over (2) the *greater* of the average yearly amount of credit-eligible university basic research expenditures for the corporation's 1981-1983 taxable years *or* one percent of the average yearly amount of the corporation's total inhouse, contract, and other credit-eligible research expenditures for those years. The 1981–83 fixed floor would not be adjusted to reflect inflation.

The amount exceeding the floor, to which the new credit would apply, would not also enter into the computation of the present-law incremental credit under section 44F. The amount of credit-eligible basic research expenditures up to the floor would remain eligible for the present-law incremental credit under section 44F (and would in later years enter into the base period amounts for purposes of computing the incremental credit).

Under the bill, no amount of property transferred to universities, etc. for basic research for which an augmented deduction (described below) would be provided would also be eligible for the new credit or the existing incremental credit.

c. Expanded special deduction for transfers to universities of scientific equipment for certain research or educational purposes

Present law

In general, the amount of charitable deduction otherwise allowable for donated property must be reduced by the amount of any ordinary gain which the taxpayer would have realized had the property been sold for its fair market value at the date of the contribution (Code sec. 170(e)). For example, a manufacturer which makes a charitable contribution of its inventory generally may deduct only its basis in the property.

However, under a provision enacted in ERTA, corporations are allowed an augmented charitable deduction for donations of newly manufactured scientific equipment to a college or university for research use in the physical or biological sciences (sec. 170(e)(4)). This increased deduction is generally for the sum of (1) the corporation's basis in the donated property and (2) one-half of the unrealized appreciation (i.e., one-half of the difference between the property's fair market value determined at the time of the contribution and the donor's basis in the property). However, in no event is the augmented deduction allowed for an amount which exceeds twice the basis of the property.

Section 202 of the bill

In place of the augmented charitable deduction rule enacted in ERTA, the bill would enact a new deduction provision, generally of broader scope, outside the charitable deduction rules. The provision would be effective for taxable years beginning after 1983.

Under the new provision, corporations would receive special deductions for amounts in excess of basis for transfers, without consideration, of scientific or technical equipment to colleges or universities or certain associations of such educational institutions, for use in either research or education in certain sciences, technologies, or equipment operation fields. Unlike present law, an increased deduction would apply to transfers of property which has been used in the transferor's business (if not for more than three years), and to transfers of computer software. In addition, special deductions would be allowed under the bill for the value of performing certain maintenance and repair services in connection with qualified equipment transfers. Except for computer software and replacement parts, only an item having a value exceeding $250 generally would be eligible for the new special deduction.

The special deduction under the bill generally would not be allowed to the extent that, determined on a product-by-product basis, the number of transferred items exceeds 20 percent of the number of such items sold by the taxpayer during the year. Also, while the transfers would not be required to qualify as charitable contributions in order for the special deduction to apply, the taxpayer's aggregate deduction in one year for both charitable contributions and transfers under the new provision would be limited to 10 percent of taxable income (computed with certain modifications), with a five-year carryforward of any excess.

d. Tax treatment of payments and loan forgiveness received by certain graduate science students

Present law

Scholarship exclusion.—Subject to several limitations, gross income does not include amounts received as a scholarship at an educational institution or as a fellowship grant (Code sec. 117).

In general, scholarships or fellowship grants are not excludable from gross income if they constitute compensation for past, present, or future employment services or for services subject to the direction or supervision of the grantor, or if the funded studies or research are primarily for the benefit of the grantor (Treas. Reg. sec. 1.117-4(c)). However, amounts received under Federal programs that are used for qualified tuition and related expenses are not disqualified from the exclusion merely because the recipient agrees to perform future services as a Federal employee or in a health manpower shortage area (sec. 117(c)).

Forgiveness of debt.—As a general rule, income is realized when indebtedness is forgiven or cancelled (sec. 61(a)(12)).

Section 203 of the bill

The bill would provide a new Code section under which gross income would not include amounts received by graduate students in certain scientific fields as a scholarship, fellowship grant, or qualified student loan forgiveness, notwithstanding that the recipient is required, as a condition of receiving such amounts, to perform future teaching services for any of a broad class of colleges or universities.

The scholarship and loan forgiveness provisions of the bill would apply to taxable years beginning after 1983.

II. DESCRIPTION OF THE BILLS

1. S. 1857—Senators Durenberger, Moynihan, Bradley, Matsunaga, Lugar, Packwood, Tsongas, D'Amato, Riegle, and Heinz

Liberalize Charitable Deduction Rules for Private Nonoperating Foundations; Amendments to Foundation Excise Tax Provisions

a. Liberalizing charitable deduction rules

Present law

In general.—Present law generally provides more favorable income tax treatment for contributions by individuals to public charities or private operating foundations than for such contributions to private nonoperating (grantmaking) foundations (Code sec. 170).

Percentage limitations.—For contributions of cash or ordinary-income property to public charities or operating foundations, the maximum amount which an individual may deduct in one year is 50 percent of his or her adjusted gross income. The 50-percent limitation applies to private nonoperating foundations only if the donees either redistribute all contributions within a specified period after receipt or qualify as a "pooled fund" foundation. For contributions of capital-gain property to organizations otherwise qualifying for the 50-percent limitation, the limitation generally is 30 percent. In the case of contributions of cash or property to private nonoperating foundations other than the two categories eligible for the 50-percent/30-percent limitations, and for certain other charitable contributions, the limitation is 20 percent.

Carryover.—Amounts in excess of the 50-percent/30-percent limitations may be carried forward and deducted over the following five years (subject to applicable percentage limitations in those years). Under present law, there is no carryover of excess deduction amounts where the 20-percent limitation applies.

Appreciated property.—In the case of donations by individuals of capital-gain property to private nonoperating foundations where the 20-percent limitation applies, the amount deductible equals the asset's fair market value reduced by 40 percent of the unrealized appreciation, i.e., by 40 percent of the amount by which the value exceeds the donor's basis in the property. In the case of donations by individuals of capital-gain property to public charities, etc., where the 30-percent limitation applies, there is no reduction from fair market value (except with respect to donated tangible personal property if use by the donee of the property is unrelated to the donee's tax-exempt purposes).

Explanation of provision

Section 1 of the bill would provide the same charitable deduction rules for contributions by individuals to all private nonoperating foundations as now apply for contributions to public charities and private operating foundations. Thus, the 50-percent/30-percent limitations would apply instead of the 20-percent limitation; any contribution amounts exceeding the limitations could be carried forward five years; and the full fair market value of donated capital-gain property generally could be deducted.

The amendments made by section 1 of the bill would apply to taxable years beginning after 1982.

b. Narrowing definition of family members

Present law

Present law contains a number of restrictions imposed on private foundations (such as prohibitions on self-dealing and excess business holdings) which depend on determinations of "disqualified persons." A "disqualified person" includes a substantial contributor, a foundation manager, or a member of the family of either a substantial contributor or foundation manager (sec. 4946). For this purpose, a member of the family includes the spouse, ancestors, and lineal descendants (and spouses of lineal descendants) of the individual.

Explanation of provision

Section 2(a) of the bill would narrow the category of "disqualified persons" by limiting family members to the spouse, ancestors, children, and grandchildren (and the spouses of children and grandchildren) of the substantial contributor, etc. The effect of this amendment would be to exclude from the definition of family member any lineal descendant who is more than two generations from the substantial contributor, etc. Thus, for example, a foundation could engage in commercial transactions with the great-grandchild of a substantial contributor which, under present law, would constitute self-dealing transactions.

The amendment made by section 2(a) of the bill would take effect on January 1, 1983.

c. Increasing reliance on IRS classification of donee organizations

Present law

The tax status of a donee organization as a public charity or private operating foundation is important to a donor private foundation because (1) foundation grants to operating foundations generally may be counted by the donor foundation as qualifying distributions in satisfaction of the section 4942 payout rules, while grants to nonoperating foundations do not so qualify (with certain exceptions); and (2) a donor foundation must exercise expenditure responsibility (sec. 4945) over grants to operating or nonoperating foundations, but not over grants to public charities.

Pursuant to Treasury regulations under section 4945, once an organization has been classified as publicly supported, the determination of whether a grant is subject to the expenditure responsibility requirements generally will not be affected by the donee's subsequent loss of classification as a publicly supported organization until notice of loss of classification is published.

However, a donor foundation may not rely on the donee organization's classification if the donor foundation is responsible for or aware of a "substantial and material" change in the donee organization's sources of support that results in the organization's loss of classification as a publicly supported organization. In general, the donor foundation will not be considered responsible for or aware of such a change in support (and hence may rely on a published classification) if the grant is made in reliance on a detailed written statement by the grantee organization that the grant will not result in loss of public charity status, and the information in such statement would not give rise to a reasonable doubt as to the effect of the grant (Treas. Reg. sec. 1.509(a)-3(c)).

To facilitate reliance on published classifications, the Internal Revenue Service has issued guidelines specifying circumstances under which a donor foundation will not be considered responsible for a "substantial and material" change in support of the donee organization (Rev. Proc. 81-6, 1981-1 C.B. 620).[1] In addition, the Internal Revenue Service has published guidelines specifying circumstances under which a grant will be considered "unusual" and hence will not cause the donee organization to lose its status as publicly supported (Rev. Proc. 81-7, 1981-1 C.B. 621).[2]

Explanation of provision

Section 2(b) of the bill would provide that a grant to an organization which the Internal Revenue Service has determined to be a public charity (or private operating foundation) would be treated as a grant to such an organization, even though the donee organization loses such status, if (1) the grant was made prior to the earlier of the date of publication by the Service that the donee organization has lost its qualified status, or the date on which the foundation acquires actual knowledge that the donee organization has been notified by the Service of loss of its qualified status, and (2) the donor foundation was not responsible for (other than by making grants) or aware of the change in the donee's status.

The amendment made by section 2(b) of the bill would apply to grants made after 1982.

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[1] Under these guidelines, a donor organization generally will not be considered responsible for a substantial and material change in support if the aggregate of gifts, grants, and contributions received from the donor organization for a taxable year does not exceed 25 percent of the aggregate support received by the donee organization from all other sources for the four taxable years immediately preceding the year of the grant. In such circumstances, the donor foundation can rely on the classification of the donee organization as publicly supported without risk that its grant will later be treated as causing the donee organization to lose its public charity status (thereby subjecting the donor foundation to excise tax liability for failure to exercise expenditure responsibility).

[2] Under these guidelines, a grant generally will be considered unusual where six conditions are met: (1) the grant is not made by a donor foundation which created the donee organization or was a substantial contributor to the donee organization; (2) the grant is not made by a donor organization which is in a position of authority to the donee organization; (3) the grant is made in cash, readily marketable securities, or assets that directly further the exempt purpose of the donee organization; (4) the donee organization has received an advance or final ruling that it is classified as a publicly supported organization; (5) there are no material restrictions imposed on the grant; and (6) if the grant is intended to pay for the operating expenses of the donee organization, the grant is expressly limited to one year's operating expenses.

d. Exemption from expenditure responsibility requirements

Present law

To avoid imposition of excise taxes under Code section 4945, a private foundation must exercise "expenditure responsibility" over grants to organizations other than public charities. In order to ensure that such grants will be properly used by the recipient for charitable purposes, the grantor must make reasonable efforts, and establish adequate procedures, to see that the grant is spent solely for proper uses, to obtain full reports from the grantee, and to make full reports to the Internal Revenue Service on the grants (sec. 4945(h)). There is no exception in present law from the expenditure responsibility requirements for grants below a specified dollar amount.

Explanation of provision

Section 2(c) of the bill would provide that a private foundation is not required to exercise expenditure responsibility over a grant to an organization if the aggregate amount of grants made during the taxable year by the foundation (and all related foundations) to that organization does not exceed $25,000. This exemption would apply to grants made after 1982.

e. Abatement of first-tier excise taxes

Present law

The Tax Reform Act of 1969 established a two-tier system of excise taxes intended to ensure compliance with the private foundation rules set forth in Code sections 4941-4945.

Under present law, any violation of the foundation rules results in imposition of an initial excise tax on the foundation (or in the case of self-dealing, on the disqualified person who entered into the prohibited transaction with the foundation). In general, this first-tier tax applies automatically when a foundation rule is violated, even if the violation in a particular instance could be deemed inadvertent. However, where a foundation fails to satisfy the section 4942 payout requirements solely as a result of an incorrect asset valuation which was due to reasonable cause, the excise tax under that section is excused if the payout deficiency is made up during a specified period.

If a violation of the foundation rules is not "corrected" within a specified period, an additional excise tax is imposed on the foundation (or in the case of self-dealing, on the disqualified person).

Explanation of provision

Section 2(d) of the bill would waive the first-tier excise tax imposed under sections 4941-4945 on the foundation (or disqualified person, in the case of self-dealing) if the Internal Revenue Service determines that the violation (1) was due to reasonable cause and not to intentional disregard of rules and regulations, and (2) the violation is "corrected" with the specified period.

The amendments made by section 2(d) of the bill would apply to taxable years beginning after 1982.

2. S. 2165—Senators Danforth, Bentsen, Chafee, Mitchell, Symms, Packwood, Wilson, Tsongas, Wallop, Pell, Dodd, and Bingaman

"High Technology Research and Scientific Education Act"

a. Extension of credit for increased research expenditures; modification of qualified research definition; equipment depreciation under credit, ACRS provisions; modification of trade or business requirement

Present Law

Current deduction for certain research expenditures

General rule.—As a general rule, business expenditures to develop or create an asset which has a useful life that extends beyond the taxable year, such as expenditures to develop a new product or improve a production process, must be capitalized. However, Code section 174 permits a taxpayer to elect to deduct currently the amount of "research or experimental expenditures" incurred in connection with the taxpayer's trade or business. For example, a taxpayer may elect to expense the costs of wages paid for services performed in qualifying research activities, and of supplies and materials used in such activities, even though these research costs otherwise would have to be capitalized.

The section 174 election does not apply to expenditures for the acquisition or improvement of depreciable property, or land, to be used in connection with research.[3] Thus, for example, the total cost of a research building or of equipment used for research cannot be currently deducted under 174 in the year of acquisition. However, the amount of depreciation (cost recovery) allowance for a year with respect to depreciable property used for research may be deducted in that year under the election. Under ACRS, machinery and equipment used in connection with research and experimentation are classified as three-year recovery property and are eligible for a six-percent regular investment tax credit.

Qualifying expenditures.—The Code does not specifically define "research or experimental expenditures" eligible for the section 174 deduction election (except to exclude certain costs). Treasury regulations (sec. 1.174-2(a)) define this term to mean "research and development costs in the experimental or laboratory sense." This includes generally "all such costs incident to the development of an experimental or pilot model, a plant process, a product, a formula, an invention, or similar property", and also the costs of obtaining a patent on such property.

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[3] Also, the statute excludes expenditures to ascertain the existence, location, extent, or quality of mineral deposits, including oil and gas, from eligibility for section 174 elections (sec. 174(d)). However, expenses of developing new and innovative methods of extracting minerals from the ground may be eligible for sec. 174 elections (Rev. Rul. 74-67, 1974-1 C.B. 63). Also, certain expenses for development of a mine or other natural deposit (other than an oil or gas well) may be deductible under sec. 616.

The present regulations provide that qualifying research expenditures do not include expenditures "such as those for the ordinary testing or inspection of materials or products for quality control or those for efficiency surveys, management studies, consumer surveys, advertising, or promotions." Also, the section 174 election cannot be applied to costs of acquiring another person's patent, model, production, or process or to research expenditures incurred in connection with literary, historical, or similar projects (Reg. sec. 1.174-2(a)).

Credit for increasing certain research expenditures

Overview

General rule.—An income tax credit is allowed for certain qualified research expenditures paid or incurred by a taxpayer during the taxable year in carrying on a trade or business of the taxpayer (Code sec. 44F, enacted in the Economic Recovery Tax Act of 1981). The credit applies only to the extent that the taxpayer's qualified research expenditures for the taxable year exceed the average amount of the taxpayer's yearly qualified research expenditures in the specified base period (generally, the preceding three taxable years). The rate of the credit is 25 percent of the incremental research expenditure amount.

Under present law, the section 44F credit applies to qualified research expenditures paid or incurred after June 30, 1981 and before January 1, 1986.

Qualifying expenditures.—For purposes of the section 44F credit, the definition of research is the same as that used for purposes of the special deduction rules under section 174, but subject to certain exclusions. A taxpayer's research expenditures eligible for the section 44F incremental credit consist of (1) "in-house" expenditures by the taxpayer for research wages and supplies used in research, plus certain amounts paid for research use of laboratory equipment, computers, or other personal property; (2) 65 percent of amounts paid by the taxpayer for contract research conducted on the taxpayer's behalf; and (3) if the taxpayer is a corporation, 65 percent of the taxpayer's expenditures (including grants or contributions) pursuant to a written research agreement for basic research to be performed by universities or certain scientific research organizations.

Relation to deduction.—The credit is available for incremental qualified research expenditures for the taxable year whether or not the taxpayer has elected under section 174 to deduct currently research expenditures. The amount of any section 174 deduction to which the taxpayer is entitled is not reduced by the amount of any credit allowed for qualified research expenditures.

Trade or business limitations

The section 44F credit is available only for research expenditures paid or incurred in carrying on a trade or business of the taxpayer. With one exception (described below), the "carrying on" test for purposes of the credit is the same as for purposes of the business deduction provisions of section 162. Thus, for example, the credit generally is not available to a limited partnership (or to any partners in such partnership, including a general partner which is an operating company) for partnership expenditures for "outside" or contract research intended to be transferred by the partnership to another (such as to the general partner) in return for license or royalty payments.

As the only exception to the rule that the trade or business test for purposes of section 44F is the same as for purposes of section 162, the Treasury Department is to issue regulations, for credit purposes only, which will allow the credit in the case of a research joint venture between taxpayers which both (1) themselves satisfy the carrying on test (e.g., the research must be in a particular trade or business already being carried on by the taxpayer) and also (2) themselves are entitled to the research results.

Thus, the credit is not available for research expenditures paid or incurred by a taxpayer merely in connection with, but not in carrying on, a trade or business. Similarly, the credit is not available with respect to expenditures paid or incurred by a taxpayer as part of a financing arrangement or hobby. Also under the trade or business test, research expenditures of a taxpayer are eligible for the credit only if paid or incurred in a particular trade or business already being carried on (within the meaning of sec. 162) by the taxpayer.

Furthermore, in cases where an organization conducting research is deemed to be carrying on a trade or business under these rules (so that the credit is available for incremental research expenditures), the Congress determined that individual taxpayers with interests in the organization should not be able to utilize passthroughs of the credit to offset tax on income from unrelated sources. Thus, individuals (including partners and S corporation shareholders) to whom the credit is properly allocable may use the credit in a particular year only to offset the amount of tax attributable to that portion of the individual's taxable income which is applicable or apportionable to such interest. (A 15-year carryover is allowed for any unused credit.) Also, allocations of the credit among partners, etc., must be in accordance with rules prescribed in Treasury regulations.

Explanation of incremental credit

Definition of qualified research

General rule.—Subject to certain exclusions, the credit provision adopts the definition of research as used in section 174. That is, the term "qualified research" for purposes of section 44F has the same meaning, subject to the specified exclusions, as has the term "research or experimental" under section 174 (described above).

While the definition of research generally is the same for purposes both of section 174 deduction election and the credit, particular research expenditures which qualify for the section 174 deduction election may be ineligible for the credit, e.g., because the expenditures fail to satisfy the section 162 trade or business requirement for the credit, because the expenditures do not fall within the categories of research expenditures (such as direct research wages) which qualify for the credit, or because the expenditures fall within one of the exclusions from the credit.

Computer software development costs.—The Internal Revenue Service has taken the position that certain costs of developing computer software may be treated in a manner similar to costs incurred in product development which are subject to the section 174 deduction election (Rev. Proc. 69-21, 1969-2 C.B. 303). This treatment applies to costs incurred in developing new or significantly improved programs or routines that cause computers to perform desired tasks (as distinguished from other software costs where the operational feasibility of the program or routine is not seriously in doubt).

For purposes of the section 44F credit, otherwise qualifying types of expenditures (for example, direct wage expenditures) which are part of the costs of otherwise qualifying research for the development of new or significantly improved computer software are intended to be eligible for the credit to the extent that such expenditures (1) are treated as similar to costs, incurred in product research, which are deductible as research expenditures under section 174; (2) satisfy the requirements of new section 44F which apply to research expenditures;[4] and (3) do not fall within any of the specific exclusions in new section 44F. That is, expenditures for developing new or significantly improved computer programs which otherwise would qualify for the section 44F credit are not to be disqualified solely because such costs are incurred in developing computer "software", rather than in developing "hardware".

Nonresearch expenditures.—The section 44F credit is not available for expenditures such as the costs of routine or ordinary testing or inspection of materials or products for quality control; of efficiency surveys or management studies; of consumer surveys (including market research), advertising, or promotions (including market testing or development activities); or of routine data collection. Also, costs incurred in connection with routine, periodic, or cosmetic alterations or improvements (such as seasonal design or style changes) to existing products, to production lines, or to other ongoing operations, or in connection with routine design of tools, jigs, molds, and dies, do not qualify as research expenditures under the credit.[5]

Exclusions

There are three express exclusions from the definition of qualified research for purposes of the section 44F credit.

First, expenditures for research which is conducted outside the United States do not enter into the credit computation.

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[4] Thus, the credit limitations and definitional restrictions (such as the distinctions between research and nonresearch expenditures, and between direct and indirect expenditures) which apply in the case of product research costs also apply in the case of the costs of developing new or significantly improved computer software.

[5] The credit is not available for such expenditures as the costs of construction of copies of prototypes after construction and testing of the original model(s) have been completed; of preproduction planning and trial production runs; of engineering follow-through or troubleshooting during production; or of adaptation of an existing capability to a particular requirement or customer's need as part of a continuing commercial activity. For example, the costs of adapting existing computer software programs to specific customer needs or uses, as well as other modifications of previously developed programs, are not eligible for the credit.

Second, the credit is not available for research in the social sciences or humanities (including the arts), such as research on psychological or sociological topics or management feasibility studies.

Third, the credit is not available for research to the extent funded by any grant, contract, or otherwise by another person (or any governmental entity).

In-house research expenditures

Employee wages qualify for the credit to the extent paid for engaging in the actual conduct of research, in the immediate supervision of the actual conduct of qualified research, or in the direct support of the actual conduct (or of the immediate supervision of the actual conduct) of qualified research. No amount of wages paid for overhead or for general and administrative services, or of indirect research wages, qualifies for the credit.

In addition, amounts paid for supplies used in the conduct of qualified research are eligible for the credit. The term "supplies" means any tangible property other than property of a character subject to the allowance for depreciation (cost recovery), land, or improvements to land. Neither the cost of acquisition of, nor the amount of depreciation (cost recovery) allowances with respect to, property which is of a character subject to the depreciation (cost recovery) allowance is eligible for the credit under present law, whether or not amounts of depreciation are deductible during the year under section 174.

Finally, amounts paid for the right to use personal property in the conduct of qualified research generally qualify for the credit, if such amounts are paid to a person other than the taxpayer or certain related persons.

Contract research expenditures

In addition to the three categories of in-house research expenditures, 65 percent of amounts paid by the taxpayer for qualified research performed on behalf of the taxpayer enters into the incremental credit computation. The research firm, university, or other person which conducts the research on behalf of the taxpayer cannot claim any amount of the credit for its expenditures in performing the contract.

If any contract research amount paid or incurred during a taxable year is attributable to qualified research to be conducted after the close of that taxable year, that amount is treated, pursuant to a prepayment limitation, as paid or incurred during the period during which the qualified research is actually conducted.[6]

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[6] For example, if on December 1, 1983, a calendar-year taxpayer paid $100,000 to a research firm pursuant to a contract for qualified research to be performed on behalf of the taxpayer, and if the research firm conducts all of such qualified research during 1984, no amount is eligible for a credit for 1983, and $65,000 (65 percent of the total contract price) is treated as research expenditures of the taxpayer paid during 1984.Amounts which are treated as contract research expenditures during a particular taxable year pursuant to the prepayment limitation rule, and hence which count as expenditures for such year entering into the credit computation for such taxable year, also are treated as having been made during that same taxable year for purposes of determining average yearly base period expenditures in later year credit computations. Thus, in the example given above, $65,000 enters into the taxpayer's 1984 credit base.

Expenditures for university basic research

A special rule treats as qualified research expenditures 65 percent of certain corporate expenditures (including grants or charitable contributions) for basic research to be performed at a college, university, or other qualified organization pursuant to a written research agreement. Under this rule (described further below), a corporate taxpayer takes into account, for purposes of computing the incremental credit, 65 percent of qualifying basic research expenditures (subject to the contract research prepayment limitation).

Computation of allowable credit

General rule

As a general rule, the section 44F credit applies to the amount of qualified research expenditures for the current taxable year which exceeds the average of the yearly qualified research expenditures in the preceding three taxable years. The base period amount is not adjusted for inflation.

For the taxpayer's first taxable year to which the new credit applied (and which ended in 1981 or 1982), the credit applied to the amount of qualified research expenditures for that year which exceeded the amount of such expenditures in the preceding taxable year. Also, for the taxpayer's second taxable year to which the new credit applied (and which ended in 1982 or 1983), the credit applied to the amount of qualified research expenditures for that year which exceeded the average of yearly qualified research expenditures in the preceding two taxable years.[7]

New businesses

For a base period year during which it was not in existence, a new business is treated as having research expenditures of zero in such year, for purposes of computing average annual research expenditures during the base period. However, the taxpayer may be deemed to have expenditures in such a base period year pursuant to the 50-percent limitation rule (described below).

50-percent limitation rule

Base period research expenditures are treated as at least equal to 50 percent of qualified research expenditures for the current year.[8] This 50-percent limitation applies both in the case of existing businesses and in the case of newly organized businesses.

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[7] Because the credit became effective for qualified research expenditures paid or incurred after June 30, 1981, a special rule was provided for computing base period expenditures for the taxpayer's taxable year which included July 1, 1981. A similar rule is to apply in the case of a taxpayer's first taxable year including December 31, 1985 (when the credit is scheduled to terminate).

[8] For example, assume that a calendar-year taxpayer is organized on January 1, 1983; makes qualified research expenditures of $100,000 for 1983; and makes qualified research expenditures of $260,000 for 1984. The new-business rule provides that the taxpayer is deemed to have base period expenditures of zero for pre-1983 years. Without regard to the 50-percent limitation, the taxpayer's base period expenditures for purposes of determining any credit for 1984 would be the average of its expenditures for 1981 (deemed to be zero), 1982 (deemed to be zero), and 1983 ($100,000), or $33,333. However, by virtue of the 50-percent limitation, the taxpayer's average base period expenditures are deemed to be no less than 50 percent of its current year expenditures ($260,000), or $130,000. Accordingly, the amount of 1984 qualified research expenditures to which the credit applies is limited to $130,000, and the amount of the taxpayer's credit for 1984 is $32,500.

Aggregation rules

To ensure that the section 44F credit will be allowed only for actual increases in research expenditures, special rules apply under which research expenditures of the taxpayer are aggregated with research expenditures of other persons for purposes of computing any allowable credit. These rules are intended to prevent artificial increases in research expenditures by shifting expenditures among commonly controlled or otherwise related persons.

Changes in business ownership

Special rules apply for computing the credit where a business changes hands, under which qualified research expenditures for periods prior to the change of ownership generally are treated as transferred with the trade or business which gave rise to those expenditures. These rules are intended to facilitate an accurate computation of base period expenditures and the credit by attributing research expenditures to the appropriate taxpayer.

Limitations and carryover

General limitation

The amount of credit which may be used in a particular taxable year is limited to the taxpayer's income tax liability reduced by certain other nonrefundable credits.

Additional limitation on individuals

In the case of an individual who owns an interest in an unincorporated trade or business, who is a beneficiary of a trust or estate, who is a partner in a partnership, or who is a shareholder in an S corporation, the amount of credit that can be used in a particular year also cannot exceed an amount (separately computed with respect to the person's interest in the trade or business or entity) equal to the amount of tax attributable to that portion of the person's taxable income which is allocable or apportionable to such interest.[9]

Carryover

If the amount of credit otherwise allowable exceeds the applicable limitation, the excess amount of credit can be carried back three years (including carrybacks to years before enactment of the credit) and carried forward 15 years, beginning with the earliest year.

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[9] For example, if in a particular year an individual partner derives no taxable income from a partnership which had made incremental qualified research expenditures, the individual may not use in that year any tax credit resulting from incremental qualified research expenditures of such partnership which otherwise would have been properly allowable to the partner (e.g., where the partnership had paid such research expenditures in carrying on a trade or business of the partnership and where any credit allowable to the partnership with respect to such expenditures had been properly allocated among the partners pursuant to Treasury regulations). If in this example the partner had derived taxable income allocable or apportionable to his or her partnership interest, then the amount of credit which may be used in that year by the individual partner may not exceed the lesser of the general limitation amount (described above) or the separately computed additional limitation amount applicable to individuals.

Effective date

Under present law, the section 44F credit applies to qualified research expenditures paid or incurred after June 30, 1981 and before January 1, 1986.

Explanation of Title I of the Bill

Extension of incremental credit

Section 101 of the bill would make permanent the section 44F credit for increased research expenditures.

Modification of definition of qualified research

Overview

Present law defines qualified research for purposes of the section 44F credit principally by a cross-reference to the definition of research developed in Treasury regulations under section 174, which allows a current deduction for certain "research or experimental expenditures" (as described above). The bill would instead provide a separate, statutory definition of qualified research for purposes of the credit, effective for post-1983 taxable years. This definition would not affect the category of research expenditures qualifying for the section 174 deduction.

Qualified research

Under the bill, qualified research would be defined to mean either—

(A) a planned search or critical investigation (including basic research) undertaken for the purpose of discovering information which may be potentially useful in the development of a new or significantly improved business item of the taxpayer, or

(B) applying the results obtained from such research activity, or other knowledge, to develop a new or significantly improved business item of the taxpayer. The definition would include as research the conceptual formulation, design, testing, and reformulation of possible business item alternatives and the design, construction, and testing of prototypes, models, and pilot plants.

Business item definitions

The bill would generally define the term "business item" to mean a product (whether or not constituting tangible personal property), process, technique, formula, invention, or a significant component part or element of a product or process, for sale, lease, license, or use by the taxpayer in a trade or business. Under a special rule in the bill, computer software that is separately developed by the taxpayer solely for its own internal use would qualify as a business item (and hence the development costs of such software would be eligible for the credit) only if the software is used in (1) qualified research undertaken by the taxpayer, (2) a production process, or (3) the performance for customers of services of which such software together with the corresponding hardware is the predominant component, or if not so used, only to the extent allowed by Treasury regulations.

A business item which the taxpayer seeks to develop or improve would be treated under the bill as new or significantly improved if both (1) the business item is developed by means of the process of experimentation, including testing in search for or evaluation of alternatives, and also (2) the predominant portion of the new characteristics or improvement relates to such factors as function, performance, reliability, quality, or cost, rather than to style, taste, cosmetic, or seasonal design factors. After a new or significantly improved business item has been fully developed to the point where it both constitutes a finished business item which meets the specific functional and economic requirements of the taxpayer for that item and also is ready for commercial sale or use, then no further expenditures with respect to that item would be eligible for the credit.

The bill would exclude from the definition of qualified research any development of plant processes, machinery, or techniques for commercial production of a new or significantly improved business item, except where such process, machinery, or technique itself constitutes a new or significantly improved business item. The adaptation of an existing business item to a particular requirement or customer's need as part of a continuing commercial activity, unless such adaptation will result in a new or significantly improved business item, would not qualify as research.

Additional exclusions

As in the case of present law, the bill would exclude from eligibility for the credit expenditures for research (1) which is conducted outside the United States; (2) in the social sciences, arts, or humanities; or (3) to the extent funded by any grant, contract, or otherwise by any person (or any governmental entity). Also as under present law, the credit would not be available for the costs of efficiency surveys, management studies, market research, market testing and development (such as advertising or promotions), routine data collections, or routine or ordinary testing or inspection of materials or business items for quality control, or for the costs of ascertaining the existence, location, extent, or quality of any deposit of ore or other mineral (including oil and gas).[10]

Effective date

The modifications to the definition of credit-eligible research expenditures made by section 102 of the bill would apply to taxable years beginning after 1983.

Treatment of equipment depreciation for credit, ACRS purposes

Credit extended to depreciation

Under present law, neither the cost of acquisition of, nor the amount of depreciation (cost recovery) allowances with respect to property which is of a character subject to the depreciation (cost recovery) allowance is eligible for the credit, whether or not amounts of depreciation are deductible during the year under section 174. Under section 103(a) of the bill, the amount of depreciation or cost recovery allowances (under secs. 167 or 168) in respect of tangible personal property used in the conduct of qualified research would be qualified research expenditures, i.e., would enter into the incremental credit computation.

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[10] See note 3, *supra*.

The amendment made by this provision would be effective, for purposes both of computing the credit and also of computing base period research expenses, for taxable years beginning after 1983.

Change in ACRS treatment

Under ACRS as enacted in ERTA, personal property used in connection with research and experimentation is classified as three-year recovery property (sec. 168(c)(2)(A)). The regular investment tax credit for property in the three-year class is six percent.

Section 103(b) of the bill would remove research equipment from the three-year class. Accordingly, research equipment would constitute five-year recovery property and would be eligible for a ten-percent investment tax credit.

The amendment made by this provision would apply to property placed in service in taxable years beginning after 1983.

Increase in qualifying percentage of contract research expenditures

The bill would increase, from 65 percent to 75 percent, the percentage of a taxpayer's contract research expenditures which enter into the computation of the section 44F credit. This provision would be effective, for purposes both of computing the credit and also of computing base period research expenses, for taxable years beginning after 1983.

Availability of credit to start-up corporations, partnerships, and other joint ventures

Under section 104 of the bill, all otherwise qualifying in-house and contract research expenses paid or incurred by a corporation[11] would be treated as qualified research expenses for credit purposes without regard to the trade or business test of present law. Thus, the research expenditures of a start-up corporation whose activities have not yet reached the level of constituting a trade or business (as defined for purposes of sec. 162) would be eligible for the credit. Also, the bill would make the credit available for corporate expenditures for research endeavors that are not directly related to any of the corporation's existing trades or businesses.

With respect to in-house and contract research expenses paid or incurred by a partnership, the bill would provide that, as a general rule, the trade or business test is to be applied at the partnership level without regard to the trade or business of any partner. If at the partnership level the test is met, any available credit would be apportioned among the partners in accordance with the partnership allocation rules of the Code (sec. 704). Under these rules, the allocation of partnership credits, like the allocation of partnership overall income and loss and items of income, loss, and deduction, is generally determined by the partnership agreement if the allocation has substantial economic effect; if not, the allocation is made in accordance with the partners' interests determined by taking into account all facts and circumstances.

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[11] For this purpose, the term corporation would not include S corporations (sec. 1361(a)), personal holding companies (sec. 542), or service organizations (sec. 414(m)(3)).

Under the bill, a partnership could elect in two cases to treat an in-house or contract research expense it has paid or incurred other than in carrying on a trade or business of the partnership as a qualified research expense. First, a partnership could so elect if each partner is a corporation;[12] thus, the bill would allow corporate joint venturers to treat in-house and contract research expenses paid or incurred by the partnership as qualified research expenses without regard to the trade or business requirement. Second, a partnership (all of whose partners are not regular corporations) could so elect if all of the in-house or contract research expenses paid or incurred by the partnership would have satisfied the trade or business requirement as applied to each of the partners had each of the partners directly conducted the research. In either of these two cases, the qualified research expense would be treated as paid or incurred directly by the partners and would be apportioned among the partners in accordance with the Code partnership allocation rules described above.

The amendments made by this provision would be effective for taxable years beginning after 1983.

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[12] See note 11, *supra*.

b. Increased credit for corporate support of basic research at universities

Present Law

General rule

Under present law, a corporation[13] may take into account, for purposes of computing the section 44F credit for a taxable year, 65 percent of qualifying basic research expenditures for that year (subject to the contract research prepayment limitation).[14] Similarly, this percentage is treated as research expenditures in a base period year when calculating the credit in subsequent years.

The special rule for basic research applies only to expenditures paid or incurred pursuant to a written research agreement between the taxpayer corporation and a college or university, certain tax-exempt scientific research organizations, and certain qualified funds (organized exclusively to make basic research grants to colleges and universities).

For purposes of this special rule, the term "basic research" means any original investigation for the advancement of scientific knowledge not having a specific commercial objective. However, the term basic research does not include expenditures for any activity excluded from the section 44F definition of qualified research, e.g., expenditures for basic research in the social sciences or humanities (including the arts).

Illustration of computation

Assume that a corporation makes qualified in-house research expenditures totalling $120 million in each of the years 1980, 1981, and 1982. In addition, in 1981 the corporation makes a $6 million grant to a university for qualifying basic research; all of this amount is expended by the university in that year. In 1983, the corporation makes qualified in-house research expenditures totalling $130 million and also contributes $3 million to a university for basic research pursuant to a written research agreement. The university expends 50 percent of the 1983 contribution funds during 1983 and the rest during 1984.

Under these facts, the corporation's qualified research expenditures for 1983 would equal $130 million *plus* 65 percent of $1.5 million ($975,000). The corporation's base period expenditures with respect to 1983 would be the average of its qualified research expenditures for 1980, 1981, and 1982, or $121,300,000. Accordingly, the 25-percent credit for 1983 would apply to the excess of total current-year expenditures ($130,975,000) over the base period average ($121,300,000), or $9,675,000.

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[13] See note 11, *supra.*

[14] If any contract research amount paid or incurred during a taxable year is attributable to qualified research to be conducted after the close of that taxable year, that amount is treated as paid or incurred in the year or years during which the qualified research is actually conducted. See note 6, *supra.*

Assume further that in 1984 the total of the corporation's qualified in-house research expenditures increases to $135 million, and that the corporation makes no new basic research expenditures. The corporation is treated as having qualifying basic research expenditures in 1984 equal to 65 percent of $1.5 million, or $975,000. The corporation's base period expenditures with respect to 1984 would be the average of qualified research expenditures for 1981 ($123,900,000), 1982 ($120 million), and 1983 ($130,975,000). Accordingly, under present law the 25-percent credit for 1984 would apply to the excess of current-year expenditures ($135,975,000) over the base period average ($124,958,333), or $11,016,667.

Explanation of Section 201 of the Bill

Overview

Under present law, research expenditures entering into the computation of the section 44F incremental credit include 65 percent of a corporation's expenditures (including grants or contributions) pursuant to a written research agreement for basic research to be performed by universities or certain scientific research organizations. Section 201 of the bill would provide more favorable tax treatment for corporate expenditures for basic research performed at universities or at certain scientific research organizations by (1) increasing, from 65 to 75 percent, the percentage of such expenditures which is eligible for a credit; (2) applying a new 25-percent credit to the excess of the percentage amount over a fixed floor based on 1981–83 expenditures, rather than over a moving base period average; and (3) making the prepayment limitation of present law inapplicable to university basic research expenditures.

The excess credit-eligible expenditures over the fixed floor under the bill, to which the new credit would apply, would not also enter into the computation of the present-law incremental credit under section 44F. The amount of credit-eligible basic research expenditures up to the floor would remain eligible for the present-law incremental credit.

Qualifying expenditures

For purposes of the new credit and the incremental credit, qualifying university basic research expenditures would be expenditures paid or incurred pursuant to a written agreement between the taxpayer corporation[15] and a university, scientific research organization, or certain other qualified organizations for basic research to be performed by the qualified organization (or by universities receiving funds through the initial recipient qualified organizations). Such corporate expenditures for university basic research would be deemed to satisfy the trade or business test (described above), whether or not the basic research is in the same field as the trade or business of the corporation.

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[15] The new basic research credit would not be available with respect to university basic research expenditures by corporations that are S corporations (sec. 1371(a)), personal holding companies (sec. 542), or service organizations (sec. 414(m)(3)).

Under the bill, qualifying expenditures would include both grants or contributions by the corporation which constitute charitable contributions under section 170, and also payments for contract research to be performed by the university on behalf of the corporation. The bill would make inapplicable to university basic research expenditures the prepayment limitation of present law, under which corporate expenditures for university basic research enter into the incremental credit computation only when the university actually expends the funds for basic research.

As under present law, the term "basic research" would be defined as any original investigation for the advancement of scientific knowledge not having a specific commercial objective, other than basic research in the social sciences or humanities (including the arts) or basic research conducted outside the United States.

Qualified organizations

To be eligible for a credit, the corporate expenditures must be for basic research to be conducted by a qualified organization. For this purpose, the term qualified organization generally would include colleges or universities, tax-exempt scientific research organizations, and certain qualified funds which are treated as qualified organizations under present law.

The first category of qualified organizations would consist of educational organizations that both are described in section 170(b)(1)(A)(ii)[16] and constitute institutions of higher education as defined in section 3304(f).[17] Scientific organizations that would qualify are tax-exempt organizations that (1) are organized and operated primarily to conduct scientific research, (2) are described in section 501(c)(3) (relating to exclusively charitable, educational, scientific, etc. organizations), and (3) are not private foundations. Also, certain tax-exempt funds which qualify under present law would continue to qualify under the bill.

In addition, the bill would treat as qualified any tax-exempt organization which is organized primarily to promote scientific research by colleges or universities pursuant to written research agreements, which expends on a current basis substantially all its funds through grants and contracts for basic research by colleges and universities and which is described in either section 501(c)(3) (charitable, educational, etc. organizations) or section 501(c)(6) (trade associations).

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[16] An educational organization is described in sec. 170(b)(1)(A)(ii) "if its primary function is the presentation of formal instruction and it normally maintains a regular faculty and curriculum and normally has a regularly enrolled body of pupils or students in attendance at the place where its educational activities are regularly carried on. The term includes institutions such as primary, secondary, preparatory, or high schools, and colleges and universities", and includes both public and private schools (Treas. Reg. sec. 1.170A-9(b)(1)).

[17] Sec. 3304(f) defines "institution of higher education" as an educational institution which (1) admits as regular students only individuals having a certificate of graduation from a high school, or the recognized equivalent of such a certificate; (2) is legally authorized to provide a program of education beyond high school; (3) provides an educational program for it which awards a bachelor's or higher degree, or provides a program which is acceptable for full credit toward such a degree, or offers a program of training to prepare students for gainful employment in a recognized occupation; and (4) is a public or other nonprofit institution.

Computation rules for new credit

The fixed floor in computing university basic research expenditures to which the new credit would apply would be the *greater* of—

(A) the average of all credit-eligible basic research expenditures under Code section 44F(e)(1) for each of the three taxable years immediately preceding the taxable year beginning after December 31, 1983; *or*

(B) one percent of the average of the sum of all in-house research expenses, contract research expenses, and credit-eligible university basic research expenditures under Code section 44F(e)(1) for each of the three taxable years immediately preceding the taxable year beginning after December 31, 1983. The amount of credit-eligible expenditures over the fixed floor, to which the new credit would apply, would not also enter into the computation of the present-law incremental credit under section 44F. The amount of credit-eligible basic research expenditures up to the floor would enter into the present-law incremental credit computation under section 44F (and would in subsequent years enter into the base period amounts for purposes of computing the incremental credit). The fixed floor would not be adjusted to reflect inflation.

Disallowance of double benefit

Under the bill, no amount for which a special deduction would be provided under section 202 of the bill (relating to transfers of scientific equipment to universities for certain research or educational purposes) would also be eligible for the new credit under the bill or the existing incremental credit.

Effective date

The amendments made by section 201 of the bill would apply to taxable years beginning after 1983.

c. Expanded special deduction for transfers to universities of scientific equipment for certain research or educational purposes

Present Law

General reduction rule for donations of property

In general, the amount of charitable deduction otherwise allowable for donated property must be reduced by the amount of any ordinary gain which the taxpayer would have realized had the property been sold for its fair market value at the date of the contribution (Code sec. 170(e)).

Thus, a donor of inventory or other ordinary-income property (property the sale of which would not give rise to long-term capital gain) generally may deduct only the donor's basis in the property, rather than its full fair market value. In the case of property used in the taxpayer's trade or business (sec. 1231), the charitable deduction must be reduced by the amount of depreciation recapture which would be recognized on sale of the donated property.

Special rule for certain research equipment donations

Under a special rule, corporations are allowed an augmented charitable deduction for donations of newly manufactured scientific equipment or apparatus to a college or university for research use in the physical or biological sciences (sec. 170(e)(4), added by ERTA).[18]

This increased deduction is generally for the sum of (1) the corporation's basis in the donated property and (2) one-half of the unrealized appreciation (i.e., one-half of the difference between the property's fair market value determined at the time of the contribution and the donor's basis in the property). However, in no event is the deduction under the special rule allowed for an amount which exceeds twice the basis of the property.

To qualify for this special deduction rule, a corporate contribution of scientific equipment to a college or university must satisfy the following requirements:

(1) The property contributed was constructed by the corporate donor;

(2) The contribution is made within two years of substantial completion of construction of the property;

(3) The original use of the property is by the college or university;

(4) Substantially all (at least 80 percent) of the use of the scientific equipment or apparatus by the college or university is for re-

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[18] Under a special rule enacted in 1976, an augmented charitable deduction also is allowed for corporate contributions of certain types of ordinary income property donated for the care of the needy, the ill, or infants (sec. 170(e)(3)).

search (within the meaning of sec. 174), or for research training, in the United States in the physical or biological sciences;[19]

(5) The property is not transferred by the donee in exchange for money, other property, or services; and

(6) The taxpayer receives the donee's written statement representing that the use and disposition of the property contributed will be in accordance with the last two requirements.

For purposes of the first requirement listed above, property is treated as constructed by the taxpayer only if the cost of parts (other than parts manufactured by the taxpayer or a related person) used in construction does not exceed 50 percent of the taxpayer's basis in the property.

Explanation of Section 202 of the Bill

Overview

The bill would delete from the section 170 charitable deduction rules the special provision (Code sec. 170(e)(4), enacted in ERTA), which allows an augmented charitable deduction up to twice the taxpayer's basis for corporate donations of newly manufactured scientific equipment to colleges or universities for research use in the physical or biological sciences. The bill would enact a new deduction provision, generally of broader scope, outside the charitable deduction rules.

Under the new provision, a corporation would receive special deductions for amounts in excess of its basis for transfers, without consideration, of scientific or technical equipment (including property used in the transferor's business, computer software, and replacement parts) to colleges or universities, for use in either research or education in certain sciences, technologies, or equipment operation fields. In addition, special deductions would be allowed for the value of performing certain maintenance and repair services in connection with such equipment transfers. Except for computer software and replacement parts, only an item having a value exceeding $250 generally would be eligible for the new deduction.

The special deduction under the bill generally would not be allowed to the extent that, determined on a product-by-product basis, the number of transferred items exceeds 20 percent of the number of such items sold by the taxpayer during the year. Also, while the transfers would not be required to qualify as charitable contributions[20] in order for the special deduction to apply, the taxpayer's aggregate deduction in one year for both charitable contributions and transfers under the new provision would be limited to 10 percent of taxable income (computed with certain modifications), with a five-year carryforward of any excess.

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[19] For purposes of this limitation on research use, and on research training use, the physical sciences include physics, chemistry, astronomy, mathematics, and engineering, and the biological sciences include biology and medicine.

[20] Court cases have held that if a transfer to a charitable organization results in a benefit to the donor, no charitable deduction is allowed under section 170. For example, the U.S. Court of Claims has upheld denial of charitable deductions claimed by a manufacturer for discounts on purchase of sewing machines by schools, where the court had found that the discounts were offered for the predominant purpose of enlarging the market for the manufacturer's brand of sewing machines (*Singer Co.* v. *U.S.*, 449 F.2d 413 (Ct. Cl. 1971)).

Transfers of qualified scientific property or services

The special deduction would apply to a transfer, without consideration, by a corporation[21] of tangible personal property that is inventory (sec. 1221(1)), of tangible personal property used in the transferor's business (sec. 1231(b)), or of computer software, and to the performance, without consideration, of services in connection with such transferred property, if such transfer of property satisfies all of the following requirements.

(1) Qualified scientific property

The transferred property must be scientific or technical equipment or apparatus, or replacement parts for such equipment. In the case of transferred inventory, the equipment must be at least 50 percent assembled by the taxpayer, and the taxpayer must be regularly engaged in the business of assembling and selling or leasing scientific equipment of that type.

Substantially all (at least 80 percent) the use of the transferred equipment must be for the direct education of students or faculty, for research (within the meaning of sec. 174), or for research training. Also, the use of the equipment must be in the United States and must be in mathematics; the physical or biological sciences; engineering; computer science; physical, biological, computer, or engineering technologies; or electronic or automated industrial, medical, or agricultural equipment and instrumentation operation.

Except for replacement parts, or computer software, only single units of qualified scientific equipment having a value in excess of $250 would qualify for the special deduction. Property which had been used in the transferor's business would qualify only if it is functional and usable without need of any repair, reconditioning, or other similar investment by the recipient. All transferred equipment would have to be accompanied by the same warranties as normally provided by the manufacturer in connection with a sale of the transferred equipment.

(2) Qualified services

The bill would define qualified services as the performance of maintenance, repair, reconditioning, or similar services which the transferor furnishes, pursuant to a standard contract with the recipient, in connection with a transfer of qualified scientific property.

(3) Eligible recipients

The qualified scientific property must be transferred to—

(a) an educational organization (within the meaning of sec. 170(b)(1)(A)(ii))[22] which is an institution of higher education (within the meaning of sec. 3304(f));[23] or

(b) an association at least 80 percent of whose members are such institutions of higher education.

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[21] For this purpose, the term corporation would not include S corporations (sec. 1361(a)), personal holding companies (sec. 542), or service organizations (sec. 414(m)(3)).

[22] See note 16, *supra*.

[23] See note 17, *supra*.

In either case, the transfer must be made through the recipient's governing body.

(4) Time of transfer/original use

In the case of inventory property, the transfer must be made within six months after substantial completion of assembly of the equipment. Also, the original use of the equipment must be by the recipient.

In the case of equipment which has been used in the transferor's business, the transfer must be made within three years after the property is first placed in service by the taxpayer.

(5) Restrictions on recipients

The bill would provide that the transferred equipment may not be retransferred by the recipient, in exchange for money, other property, or services, within five years after receipt.

The transferor must obtain a written statement from the recipient's governing body, executed under penalties of perjury, representing that the latter's use and disposition of the property will be in accordance with the requirements for the special deduction. In the case of a transfer of equipment which has been used in the taxpayer's business, the recipient must also state that the property will be functional and usable without need of any repair, reconditioning, or other investment.

Allowable deduction

The amount of deduction allowed for transfers of qualified scientific property or services meeting the requirements of the bill would be as follows:

(*a*) *Tangible inventory property or computer software.*—Fair market value, but limited to the *lesser* of (a) twice the taxpayer's basis in the property *or* (b) the sum of the taxpayer's basis in the property plus one-half of the unrealized appreciation (i.e., one-half of the difference between the property's fair market value determined at the time of the transfer and the basis in the property).

(*b*) *Tangible property used in the transferor's business.*—The *lesser* of (a) 150 percent of the taxpayer's basis in the property (computed without regard to depreciation adjustments), less accumulated depreciation, *or* (b) fair market value.

(*c*) *Qualified services.*—The *lesser* of (a) the fair market value of such services (as determined by the amount normally paid by customers for such services) *or* (b) 150 percent of the taxpayer's direct costs of providing such services, in either case reduced by the amount for which a deduction is allowed to the transferor under section 162, as ordinary and necessary business expenses, in respect of such services.

Special limitations

Equipment limitation.—Under the bill, the special deduction would not be allowed for transfers of scientific equipment (other than used equipment) to the extent that, determined on a product-by-product basis, the total of transfers in the taxable year by the taxpayer of such equipment exceeds 20 percent of the number of units of such product sold by the taxpayer in the ordinary course of its business in that taxable year.

Overall limitation.—Also, while transfers of qualified scientific property or services would not have to qualify as charitable contributions[24] in order for the special deduction to apply under the bill, the corporation's aggregate deduction for charitable contributions under section 170 and transfers under the new provision could not exceed 10 percent of its taxable income (computed with certain modifications). Any amount of the special deduction exceeding this limitation could be carried forward in the same manner as an excess charitable deduction by a corporation (i.e., the excess could be carried forward to the five succeeding taxable years, subject to the percentage limitation in those years).

Effective date

The provisions of section 202 of the bill would be effective for taxable years beginning after 1983.

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[24] See note 20, *supra*.

d. Tax treatment of payments and loan forgiveness received by certain graduate science students

Present Law

In general

Subject to several limitations, gross income does not include amounts received as a scholarship at an educational institution or as a fellowship grant (Code sec. 117). In general, a degree candidate may exclude the entire amount of the scholarship or fellowship grant, except for any portion which is regarded as payment for services in the nature of part-time employment. An individual who is not a candidate for a degree is limited to an exclusion of $300 per month for a period of 36 months.

Future services as compensation

In general, scholarships or fellowship grants are not excludable from gross income if they constitute compensation for past, present, or future employment services or for services subject to the direction or supervision of the grantor, or if the funded studies or research are primarily for the benefit of the grantor (Treas. Regs. sec. 1.117-4(c)). However, amounts received under Federal programs that are used for qualified tuition and related expenses are not disqualified from the exclusion merely because the recipient agrees to perform future services as a Federal employee or in a health manpower shortage area (sec. 117(c)).

In 1977, the Internal Revenue Service ruled that awards made under the provisions of the National Research Service Awards Act to individuals who, in return for receiving the awards, must subsequently engage in health research or teaching or some equivalent service (and must allow the government to make royalty-free use of any copyrighted materials produced as a result of the research) are not excludable as scholarships or fellowship grants (Rev. Rul. 77-319, 1977-2 C.B. 48). However, this ruling was overturned by the Revenue Act of 1978 for awards made during calendar years 1974-1979, and by subsequent legislation for awards made through 1983.

Income from debt cancellation

As a general rule, income is realized when indebtedness is forgiven or cancelled (sec. 61(a)(12)). In the case of discharge from debt when the taxpayer is in bankruptcy or is insolvent or the discharge of qualified business indebtedness, the discharge amount instead may be applied to reduce tax attributes of the debtor (or in certain circumstances, may be excluded from income) (secs. 108, 1017).

The Tax Reform Act of 1976 provided a special income exclusion rule for cancellation of certain student loans. The exclusion under that rule applied to debt discharges (prior to 1979) pursuant to a loan agreement under which the indebtedness would be discharged if the individual worked for a period of time in specified professions in certain geographical areas or for certain classes of employers. This rule applied to student loans made to an individual to assist in attending an educational institution only if the loan was made by a government unit or agency. The rule was extended by the Revenue Act of 1978 to such discharges occurring through 1982.

Explanation of Section 203 of the Bill

In general

The bill would provide a new Code section 117A, under which gross income would not include amounts received by certain graduate science students as a scholarship, fellowship grant, or qualified student loan forgiveness, including situations where the recipient is required as a condition of receiving such amounts to perform future teaching services for any of a broad class of qualified educational organizations.

Qualified recipients

Under the bill, the new provision would apply to a student who has a bachelor's degree or its equivalent and who is engaged in postgraduate study as a degree candidate in mathematics, engineering, the physical or biological sciences, or computer science at a qualified educational organization. The latter term would mean an educational institution that is described in section 170(b)(1)(A)(ii),[25] admits as regular students only individuals having a certificate of graduation from a high school (or the recognized equivalent of such certificate), is legally authorized to provide an educational program beyond high school, and provides an educational program for which it awards a bachelor's or higher degree.

Qualified student loan forgiveness would be defined as forgiveness of a loan received by a qualified student for the purpose of financing postgraduate study in mathematics, engineering, the physical or biological sciences, or computer science, but only to the extent that the loan was actually expended for qualified tuition and related expenses (as defined below), and where the student is required to perform teaching services for any of a broad class of qualified educational organizations on completion of the postgraduate course of study, under the terms of a written loan agreement and as a condition of receiving loan forgiveness.

Limitations on exclusion

The exclusion from gross income under the bills would not extend to amounts received as payment for teaching, research, or other services as part-time employment required during the period of postgraduate study as a condition to receiving the scholarship, fellowship grant, or qualified student loan. However, teaching, research, or other services would not be regarded as such part-time employment if such activities are required of all candidates (whether or not recipients of scholarships, fellowship grants, or qualified student loans) for a particular degree as a condition to receiving the degree.

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[25] See note 16, *supra*.

The bill provides that amounts otherwise qualifying for exclusion from gross income as a scholarship or fellowship grant under new Code section 117A would not be includible in gross income merely because of a requirement for performance of teaching services, after completion of the postgraduate course of study, for any of a broad class of qualified educational organizations. For this rule to apply, the recipient also must establish that the amount of the award or grant was used for qualified tuition and related expenses, which would be defined as tuition and fees required for enrollment or attendance, and fees, books, supplies, and equipment required for courses at the educational institution.

Effective date

Section 203 of the bill would apply to taxable years beginning after December 31, 1983.

Senator DURENBERGER. The hearing will come to order. We have a public hearing this morning on foundations, high technology, and depreciation proposals.

Do either of my colleagues have any statements they would like to make before we call the witnesses?

Senator MITCHELL. Mr. Chairman, I do. I have a brief statement I would like to make now, because I will have to leave to go to a meeting of the Environment Committee in a few minutes.

First, I want to congratulate you on scheduling a hearing on S. 2165, the High Technology, Research, and Scientific Education Act, as well as Senator Danforth for his role in this area. I hope this hearing will be followed by prompt action by the committee.

Maintaining and improving our world leadership in technology is an objective that enjoys bipartisan support. Anyone who examines the economic challenges facing our Nation must conclude that steps have to be taken to enhance our economy's capacity to innovate. Essential to any comprehensive program aimed at advancing American research and development capability is conforming the Tax Code to affect unique concerns of innovative companies.

S. 2165 acknowledges the importance of both business and universities in the innovation process. By improving and making permanent the R&D tax credit, the bill should improve the effectiveness of the credit by giving research-intensive businesses greater certainty on the long-term availability of this incentive.

In addition, the proposed credit for business contributions to universities should provide much needed financial support for basic research.

The bill also modifies the tax incentive for the donation of scientific and technical equipment to universities.

I am pleased to have played a role in the enactment of this provision. In 1981, Representative Shannon and I introduced the special deduction which was incorporated into the Economic Recovery Tax Act of 1981.

Improvements included in S. 2165 will enable the equipment-donation incentive to improve both the education of science students and the research done at universities.

While I recognize that tax proposals constitute only one part of an overall program to bolster U.S. research and development efforts, I believe that enactment of S. 2165 should be a high priority, and I hope that the short legislative schedule this year will not prevent us from moving quickly on this important legislation.

Thank you very much, Mr. Chairman.

Senator DURENBERGER. Thank you very much.

Senator DANFORTH. I have a statement for the record.

Senator DURENBERGER. Without objection, it will be included in the record.

Our first witnesses are Congressman Zschau and Congressman Chandler.

We appreciate your being here, and your full statements will be made part of the record. You may do with them as you please

STATEMENT OF HON. ED ZSCHAU, U.S. REPRESENTATIVE, STATE OF CALIFORNIA

Mr. ZSCHAU. Thank you very much, Mr. Chairman.

I am Ed Zschau. I represent California's 12th District, which is often called the Silicon Valley area in the United States. There are some 700 high technology companies in my district.

I will be brief. I do appreciate very much the opportunity to voice my strong support for S. 2165. I am a cosponsor of the companion bill in the House, H.R. 4475, introduced by my colleague from Massachusetts, Jim Shannon. I hope that the legislative schedule will permit the passage of this legislation, because I think it is critical to the future of our economy, not just our high technology industries.

Let me make a couple of general comments first. This bill is characterized as a "high technology bill" as it well should be. However, it also can have a dramatic impact on rejuvenating the basic industries in our country that some people have written off. Just because they have lost their competitive edge in certain markets, some people feel that we ought to give up on the smokestack industries, as they are often called. But the worldwide demand for automobiles, steel, and durable goods that those basic industries focus on is not going away. By encouraging research and development, the development of new ideas, we can not only promote our leadership in those areas where we have had a good competitive advantage but we can also improve our competitiveness in those areas where we lost that competitive edge.

There are some people that feel that the way to do this is to establish some sort of a central planning board. In fact, my colleagues on the House Economic Stabilization Subcommittee recently passed out legislation that would create an Industrial Competitiveness Council and an Industrial Competitiveness Bank for targeting by Government of those industries wherein competitiveness has faltered.

I feel that those approaches are doomed to failure. It's difficult enough for those people in the private sector to know where the opportunties are, where the technologies of choice will be.

The proper role of Government, in my opinion, is to create in this country an environment for innovation; to target, if you will, the process of innovation.

There are some prerequisites for such an environment for innovation: We have to have a commitment to basic research, we have to have incentives for the risktakers, we have to have an adequate supply of trained technical people, and we have to have ample market opportunities.

This legislation, S. 2165, would strengthen three of those prerequisites.

By creating additional incentives for corporations to contribute to colleges and universities as well as nonprofit research organizations, we can enhance our capability for basic research in this country. In addition, we can get another very subtle but important benefit—closer cooperation between industry on the one hand and the researchers on the other, so that those ideas that are developed in the research organizations can find their way into the private sector quickly.

Secondly, by extending and making permanent the R&D tax credits and focusing them on true R&D, we will create greater incentives for corporate risktaking.

I think I should emphasize here that R&D programs are of a long-term nature. When I was in the high technology industry, we would often pursue programs with 5- to 7-year durations. A temporary tax credit does not create incentives for long-term research and development. Therefore, rather than providing a simple extension of the R&D tax credit, I think it is important to make it permanent, so that companies can enter into long term, risky research and development programs knowing that the credit will be there.

Finally, we realize that we don't have enough trained technical people in this country. There is a shortfall caused by the great expense of educating such people. By creating incentives for corporations to contribute needed equipment to universities, we can help reduce that shortfall and enable us to be competitive.

I shall conclude by saying that a detailed analysis of this legislation and how it would address these problems is described very well in testimony that you are going to be hearing later by Roger Wellington, representing the American Electronics Association. It has a lot of the details about the problems facing high technology in this country and specifically how this legislation would solve those problems.

Let me just conclude by saying I appreciate the efforts that have gone into this legislation and the holding of the hearings. I think the legislation would be both effective and efficient, and it would deal not just with high technology, where we have had some outstanding performances, but it would enable this country to rejuvenate those industries that have been ailing in the recent past and enable us to create many more jobs for the future.

Senator DURENBERGER. Thank you very much.

Congressman Chandler.

[Congressman Zschau's prepared statement follows:]

PREPARED STATEMENT OF ED ZSCHAU

Mr. Chairman, I appreciate the opportunity to appear before these distinguished subcommittees to present my views on the bill S. 2165, the High Technology Research and Scientific Education Act. The issues that are addressed in the bill--refining and making permenant the research and development (R&D) tax credit and providing tax incentives for private sector support of research and science education in our nation's universities--are particularly important to me since I represent the part of Northern California that has become known worldwide as Silicon Valley. There are more than 700 high technology companies--many of them small, start-up firms--in and around my congressional district.

At the onset, I want to express my strong support for the provisions in S. 2165. I am a cosponsor of H.R. 4475--the companion bill in the House--which was introduced by my distinguished colleague from Massachusetts, Congressman Jim Shannon. I want to commend you, Mr. Chairman, for your leadership on this issue and other intiatives to promote U.S. leadership in high technology.

IMPROVING INDUSTRIAL COMPETITIVENESS AND CREATING JOBS REQUIRES INNOVATION

America's challenge today and for the future is creating enough new and satisfying jobs to employ our growing workforce and to increase the standard of living for all Americans. The key to meeting this challenge is industrial competitiveness--developing and producing products and services whose quality and prices make them attractive to consumers abroad as well as those here at home.

In recent years, some American industries have lost their competitive edge. U.S. firms have been beaten out in foreign markets, and they've lost market share here at home. That's cost American jobs.

Some suggest that this is a permanent condition. They say that America should "write off" industries that have lost ground and concentrate soley on new "sunrise" industries.

I disagree. I believe America can become competitive again in those traditional industries that still have growth potential worldwide. However, to do so American industries will have to exploit change rather than fight it. U.S.

firms will have to operate in new and better ways. They'll have to offer improved products and services. They'll have to find techniques to increase worker productivity and product quality. In short, American industries must apply far more technology and innovation.

A GOVERNMENT PLANNING BOARD WON'T STIMULATE INNOVATION

Some "experts" have suggested that government can improve our industrial competitiveness by identifying promising technologies and industries and then "target" them with special assistance and funding. One would think that the results of the British experiment and the recent U.S. experience in government "assistance" to synthetic fuels, for example, would illustrate the fallacy of that approach. Still, the House Economic Stabilization Subcommittee recently passed a bill which proposes forming a Council for Industrial Competitiveness and an associated Bank for Industrial Competitiveness. These new agencies would be charged with formulating a "broad industrial strategy" providing billions of dollars in federal funds to targeted companies.

I believe such a scheme would be doomed to failure. Bureaucrats in Washington, D.C. shouldn't be given the job of picking between opportunities and dead ends. Making such decisions is hard enough for investors or managers in the private sector who are on the firing line and have much to gain or lose personally from the results. Besides, politics would undoubtedly play a major role in the decisions. The history of federal handouts indicates that the money is often given to the industries and regions who are best represented in Washington rather than on the basis of merit.

A recent Price-Waterhouse survey of over 400 companies--mostly small and mid-sized firms--showed that business people understand the folly of such government intervention. Less than five percent of those surveyed supported the approach of government finance banks or industrial targeting.

GOVERNMENT SHOULD CREATE AN ENVIRONMENT FOR INNOVATION

The federal government does have role to play in promoting U.S. technology and industrial competitiveness, but I believe it should be a "targeting" of a different kind. Rather than targeting specific technologies or industries, the proper role of government is to target the process by which new ideas and products are developed--the process of innovation. That is, our government should focus on creating an environment in this country in which innovation, new ideas, and new companies are likely to flourish and in which firms in mature industries can modernize. Making sure that such an environment exists is the best way government can help America maintain its technological leadership and industrial competitiveness.

There are four conditions needed for an environment that promotes innovation:

- A strong commitment to basic research, deepening and broadening our understanding of fundamental processes that will form the basis for industries, processes, and products in the future;
- Incentives for investors, entrepreneurs, and innovators to provide the capital and take the personal risks associated with making technological advances, developing new products, establishing new companies, and rejuvenating mature industries;
- A strong educational capability, particularly in the sciences, that assures an ample quantity of trained technical and managerial personnel and a broad base of educated and well-trained citizens who can meet the challenges of a rapidly changing world;
- Expanding market opportunities, domestic as well as foreign, which require a healthy domestic economic environment and aggressive trade policies.

Proper government policy for industrial competitiveness is one that focuses on these prerequisites for innovation. It consists of specific legislative and regulatory initiatives that foster these conditions and avoids government actions that would weaken them. The specific initiatives needed will vary as actions are taken and events unfold, but there are specific actions that can and should be taken right now.

S. 2165 WOULD SIGNIFICANTLY IMPROVE THE U.S. ENVIRONMENT FOR INNOVATION

Mr. Chairman, the passage of S. 2165 would significantly improve the environment for innovation in the United States because it contains measures that would enhance three of the four prerequisites that I have mentioned.

S. 2165 Would Stimulate Corporate Support of University Research

America must increase its commitment to basic research in colleges, universities, and research laboratories. The truly basic research--such as the study of DNA that eventually resulted in gene splicing technology which spawned the genetic engineering industry--will normally not be pursued by the private sector because it is not related closely enough to specific products. Basic research performed in America's colleges and universities also helps to train the scientists and engineers needed for teaching and future research.

I believe that closer relationships between research institutions and American industry should be encouraged. Closer ties would better expose researchers to the problems and opportunities that American firms face and might result in speedier application of research results to practical situations.

Provisions in S. 2165 would stimulate more corporate support of basic research by offering a 25% tax credit for _increases_ in corporate funding of basic research in universities and other non-profit institutions. It would also reduce the enormous dependency that universities have today on federal funding of basic research and would encourage closer ties between the research institutions and the private sector.

The tax incentives in S. 2165 are an extremely efficient means of funding basic research. The private sector would tend to support those institutions with the most creative researchers and those areas of study that have the greatest potential.

S. 2165 Would Encourage More Corporate Research and Development

In addition to more university and non-profit research, we need stronger incentives for corporate R&D. The Economic Recovery Tax Act of 1981 contained such an incentive--a 25 percent tax credit on _increases_ in corporate research and development expenditures.

This tax credit was an excellent idea. It appears already to have had a positive effect on research and development expenditures. Although the R&D credit was only partially phased-in in 1981 and 1982, a recent McGraw-Hill survey showed that despite the severe recession during that period, there was a significant increase in R&D spending during those years, making it the first post-war recession in which the pace of research spending didn't decline.

The R&D tax credit can be an important incentive for innovation in all industries, but the restrictions that were placed on it by Congress and the Treasury Department have prevented it from being as effective as it should be. They have limited the credit's applicability for start-up companies and computer software, and, most importantly, the tax credit is only temporary. It expires on December 31, 1985. However, since most R&D projects are long-term in nature, a temporary R&D tax credit cannot provide an adequate incentive for such projects.

The Administration should be commended for recongnizing this short coming. However, Treasury has proposed only a temporary extension of the credit. I believe such an extension would continue to prevent the credit from being an effective instrument for long term R&D projects.

S. 2165 would refine the applicability of the R&D tax credit and make it permanent. Since companies could be assured of the credit's scope and availability when planning long-range projects, it would be fully effective in stimulating more corporate R&D.

S. 2165 Would Help Educate More Technical Personnel

In order to maintain U.S. technological leadership, our educational systems must provide an adequate supply of trained people--particularly in the sciences and engineering. The future demand for engineers and technicians is predicted to outstrip the supply. This could put us at a severe competitive disadvantage in world markets. Japan, for example, with half the population of the U.S., is training more engineers per year than the United States. The American Electronics Association (AEA) estimates we will have a shortage of about 90,000 engineers and computer scientists in the electronics industry over the next five years.

Although there are improvements needed at all levels of our educational system--pre-college, college, vocational, continuing, and worker retraining--I believe the most critical educational roadblock to innovation today stems from a lack of capacity in our university science and engineering departments. This is due to the high cost of educating technical people. Universities struggle to attract enough qualified professors because industrial salaries are so attractive. As a result, there are currently more than 2000 unfilled faculty openings in U.S. engineering schools. Sadly, 75 percent of the engineering student applicants are turned away. Also, most schools can't afford to buy all the up-to-date equipment needed to train engineers and scientists.

Private industry has an important role to play in funding technical education programs. The AEA and the Massachusetts High Technology Council, for example, have already established industrial giving programs to collect money from corporations for faculty salaries and equipment.

The federal government has a role to play, too. The tax credits and enhanced deductions for corporate contributions of state-of-the-art equipment and support services for educational purposes that are proposed in S. 2165 should be enacted into law. Such incentives would encourage more private sector support for increasing the capacity of our technical education facilities without requiring a new federal bureaucracy to carry it out.

Mr. Chairman, technology and innovation are perhaps our nation's greatest strengths. We must preserve them. However, innovation cannot be forced. It can only be fostered. It is fostered by creating an environment that emphasizes freedom of scientific and industrial activities and that offers incentives to the innovators, entrepreneurs, and investors who have the talent and resources to advance and apply technology. It is fostered by a thorough understanding of fundamental scientific processes and by a population that is well-educated in science and its application. It is fostered in a healthy economic environment and by trade policies that provide expanding market opportunties for our technology and basic manufacturing companies. Promoting such an environment should be a primary policy objective of the United States.

STATEMENT OF HON. ROD CHANDLER, U.S. REPRESENTATIVE, STATE OF WASHINGTON

Mr. CHANDLER. Thank you, Mr. Chairman.

I am Rod Chandler. I represent the 8th District of the State of Washington, which is the suburban area of the Seattle area, an emerging high technology area—certainly not a Silicon Valley that Ed represents, but an emerging one.

Mr. Chairman, as a member of the Steering Committee of the House Republican Task Force on High Technology Initiatives, chaired by my colleague and friend Congressman Zschau, I want to compliment you, the members of the Senate Finance Committee, and particularly Senator Danforth for your leadership.

We are addressing today an area of extreme importance, the serious erosion of our Nation's research and development activities. In a prepared statement, I have outlined some of the detailed arguments on behalf of the legislation, and I have submitted that for the record. I would like to simply add a few brief comments.

As a nation, as a Federal Government, we must encourage innovation and new ideas. It should be the goal of this Congress to promote three fundamental approaches:

One. A Strong commitment to basic research at our national laboratories, our colleges, and universities, and in the private sector;

Two. Incentives for risk-taking so that we see development of new technologies, new products, and the rejuvenation of mature industries;

Three. Communication and direct cooperation between Government, the academic community, and private industry, to promote the transfer and ultimate usefulness of laboratory technology.

In my view, S. 2165 and H.R. 4475 are important steps toward achieving the goals I have outlined. Permanent extension of the research and development tax credit will enhance the already recovering and growing investment by private industry in research.

The bill also recognizes the extreme importance of higher education to the advanced technology industry. Although legislation is not the answer to the entire problem facing higher education, it certainly goes a long way toward encouraging the private sector to assist colleges and universities, and in turn for those schools to become a greater resource for the private sector.

Last year the Washington legislature approved the development of a high technology center located at the University of Washington and has appropriated nearly $1.6 million for planning and initial operating costs. The center has an advisory board made up of representatives of industry and the academic community, with the majority of the board from industry, and expects to fund specific project by matching contributions from industry and Government.

This center represents an outgrowth of a long history of university-industry cooperation in Washington State, most recently in the advanced technology area.

Speaking as a Member of Congress from the State of Washington, where advanced technology has been a way of life for decades, I wholeheartedly endorse the legislation before us today, and thank you for this opportunity to testify.

Senator DURENBERGER. Thank you all very much.

[Congressman Chandler's prepared statement follows:]

PREPARED STATEMENT OF CONGRESSMAN ROD CHANDLER

MR. CHAIRMAN. As a member of the Steering Committee of the House Republican Task Force on High Technology Initiatives, I would first like to thank the Chairman for holding hearings on this extremely important legislation. The Senate Finance Committee and its members, particularly Mr. Danforth, have shown outstanding leadership in identifying and addressing with positive legislative solutions a grave illness in the American economy--the serious erosion in our country's research and development activities. This is true not only today as indicated by these hearings but also in 1981 with the initial adoption of the research and development tax credit.

I am also gratified by the bi-partisan nature of the support for this measure on both the House and Senate side. As we all know, meeting the challenge of maintaining our country's world technological preeminence should and must not be disrupted by partisan political haggling.

The threat to this preeminence is well chronicled. During the 1970s, research and development expenditures declined precipitously in the United States as a per cent of gross naional product, falling almost 10% and reaching a low in 1977-8 of only 2.23%. During the same period, our two most aggressive trading partners--Japan and West Germany--were significantly increasing their research and development expenditures as a percent of gross national product by 20 and 21 percent respectively. Fortunately, there are signs that this trend is reversing. In 1983, United States research and development as a fraction of gross national product was estimated at 2.65%--about equal to Japan and West Germany. However, since the U.S. conducts much more defense related research and development than our two competitors, our civilian research and development efforts as a percentage of gross national product still lag those of West Germany and Japan.

The effects of the 1970s short-sighted research and development policies on America's leadership position in the world economy are starting to emerge. In 1965, U.S. scientists wrote 42 percent of the world's literature in physics, by 1977 they accounted for only 30 percent. In engineering, the decline from 1965 to 1977 was from 50 percent to 30 percent. Similarly, the United States in the 1950s was primarily responsible for 75 to 80 percent of all major technological innovations developed in the U.S., the U.K., West Germany, France and Japan. In the 1970s, the U.S. percentage declined to almost 50 percent. These disturbing statistics coupled with the variety of studies that document the critical relationship of technological innovation to growth in our gross national product are clearly cause for concern.

What then should the Federal government's role be to ensure that we do not face in 1993 the same threat to America's technological competitiveness that we face today? The answers are far from simple. But inevitably our focus must be on promoting an economic environment which encourages innovation and new ideas--technological breakthroughs which not only spawn new industries but also serve to assist in the modernization of mature industries--without unnecessary government interference. By necessity, this environment will require the Federal government:

--to make a strong committment to basic research--at our national laboratories, in our colleges and universities, and in the private sector--exploring the fundamental processes that ultimately will form the basis for products and industries of the future;

--to provide incentives to investors and entrepreneurs in private industry to invest capital and take the personal risks associated with development of new products, new companies, and the rejuvenation of mature industries;

--to promote communication and cooperative initiatives between government, the academic community, and private industry that help expedite the transfer of technology from the laboratory shelf to the marketplace.

In short, we must target the process of innovation. We must undertake specific legislative and regulatory initiatives that foster this type of environment and avoid those that do not. I believe that S. 2165 and its companion bill in the House, H.R. 4475, are important initiatives directed toward achieving these goals.

S. 2165's comprehensive approach to maintaining America's technological leadership is basically three-fold:

--It encourages the continued resurgence of private industry's research and development by making the existing research and development tax credit permanent and expands its applicability to include software and start-up companies.

--It assists in the "retooling" of the scientific education programs of our colleges and universities by providing incentives to the private sector to encourage corporate donations of scientific equipment.

--It expands existing incentives for corporate funding of university research thus promoting basic research and over the longer term promoting more efficient technology transfer between our universities and the private sector.

All three steps are designed to meet critical needs.

I. IMPROVEMENT AND EXTENSION OF THE RESEARCH AND DEVELOPMENT TAX CREDIT.

The permanent extension of the research and development tax credit provides an important strategy in the world-wide battle for technological leadership. The tax credit, initiated in the Economic Recovery Tax Act of 1981 and due to expire in December of 1985, appears to already have had a positive effect on research and development expenditures. Although the credit was only partially phased in in 1981 and 1982, a recent McGraw Hill survey showed that despite the severe recession during that period, there was a significant increase during those years. This marked the first post-war recession in which the pace of research spending advanced.

A recent survey by the American Electronics Association of its membership provides evidence of the credit's future impact on private sector research and development spending. The survey showed that a permanent research and development tax credit, similar to the four-year program enacted in 1981, would increase annual research and devlopment spending by AEA companies 20 to 25 percent. While only 24 percent of the companies surveyed did change their research and development budgets in response to enactment of the 1981 credit, at those companies research and development spending increased an average of 63 percent. More significantly, the survey showed that fully 60 to 70 percent of the companies would utilize R&D tax credit provisions to increase R&D spending over the long term.

It is important to note that the legislation also narrows and clarifies the definition of qualified research for R&D credit purposes to ensure that the credit fulfills the purposes for which it was enacted. Given the current significant deficits our country faces, this point cannot be overemphasized. At the same time, I hope we will not be stampeded by these same budget deficits into overlooking the permanent nature of the proposed credit. American industry traditionally has been berated for its short-sighted, near-term goal oriented approach to product development and corporate management. Given the lessons of the last 10 years, I would hope that we would examine very closely proposals to limit the credit's term and their corresponding impact on its effectiveness. True research and development can be a fairly long and risky business and it should be recognized as such.

II. PROMOTION OF UNIVERSITY RESEARCH AND SCIENTIFIC EDUCATION.

Another area of great concern to me and a number of my colleagues in the House addressed by the legislation is the abominable condition of many of our colleges' and universities' science education programs. For the past several years, much has been said in the press and elsewhere about the decaying infrastructure of our urban cities. Until quite recently, however, much less has been said about a similar deterioration in the laboratory facilities and physical plants of our institutes of higher learning. One only has to look at recent studies to recognize our universities' dilemma and recognize that the need to update this "infrastructure" is every bit as real as the problems faced by our great cities.

Recent testimony before the Senate Subcommittee on Science, Technology, and Space by William Richardson, Vice Provost for Research and Dean of the Graduate School of the University of Washington delineates the problem. Dean Richardson comments:

> Two points documented in reports published in recent years by the Association of American Universities are particularly noteworthy. First, the AAU report of 1980 compares the age of research instruments in universities and in industry. Whereas 50 percent of the instruments in industry were less than 3.5 years old, that number was twice as large, seven years, in universities. In other words, roughly half the equipment in universities is twice as old as industry. This three and a half year difference is itself in many cases equivalent to state-of-the-art useful lifetime of much scientific equipment. For industries to remain competitive, it is inappropriate for students to be trained on obsolete equipment.
>
> A second important point emerging from these reports is the tremendous increase in the cost of adequate instrumentation to undertake modern day research. Capital costs have doubled or more over a recent five-year period. Over a ten-year period, from 1970 to 1980, the evidence suggests that the cost of providing adequate equipment for a new faculty member in a research-oriented

> chemistry department increased more than fivefold. Beyond this, in many departments such as chemistry, methodology has changed in such a way as to make these sciences truly high technology enterprises. Many basic tools required for a wide range of faculty and graduate students, those that are standard items, cost in the hundreds of thousands of dollars each.

Small wonder that a survey by the American Electronics Association found that, merely to replace existing outdated scientific equipment, universities would be required to invest hundreds of millions of dollars.

The deterioration of our science and engineering schools infrastructure has not solely been limited to the physical plant. For example, there now exist over 2,000 vacancies in university engineering facilities, with computer-related faculty vacancies as high as 50 percent at some universities. The situation in computer science is particularly extreme. A report in 1980 submitted by the Computer Science forum estimated that the supply of new Ph.D's in computer sciences is about 15 percent of demand. Moreover, the Chronicle of Higher Education reported in 1981 that salary offers in private industry for computer scientists had risen 40 percent over a three-year period. Universities offering budget tightened salaries and inadequate equipment have been unable to compete.

S. 2165 looks to help alleviate these problems by increased university/private sector cooperation and collaboration. First, it provides for an enhanced deduction for corporate donations of scientific equipment for postsecondary schools. Second, it creates a new credit equal to 25 percent of that portion of a corporation's payments to universities for basic research which exceeds a fixed maintenance of effort floor.

While both of these approaches will clearly assist colleges and universities in upgrading their infrastructure, there is an additional important benefit which results. One of the key issues that we currently face deals with that of technolgy transfer--or how do we best disseminate new ideas from the laboratories to the world markets.

This legislation promotes that process and its hope is exemplified by an evolving program in my home state of Washington. Last year, the Washington Legislature approved the development of a High Technology Center located at the University of Washington and has appropriated almost $1.6 million for planning and initial operating costs. The Center has an advisory board made up of representatives of industry and the academic community with a majority of the board from industry and expects to fund specific projects by matching contributions from industry and government.

A summary look at the initial statement of purposes for the Center as handed down by the University of Washington's Board of Regents is most revealing and embodies, I believe, much of the spirit of the legislation we are discussing today:

> --The Center shall be operated as a research enterprise which is complementary to, but not a substitute for, existing science and engineering education and research opportunities available to students of science and engineering in the State of Washington. It shall develop and carry out research projects which both broaden and enrich the education and research opportunities available to students of science and engineering in the State of Washington.

--The Center shall promote and engage in a broadly-based joint industry-university research program in areas of new and emerging technology which will establish it as a leader in the development of new, commercially applicable technology.

--The Center shall focus on research that is longer range and more broadly applicable than that normally conducted in industrial research laboratories.

--The Center shall provide small firms with access to shared research resources that are especially important for their success.

--The Center shall promote actively the transfer of the technology it develops to participating companies and to others, as appropriate, for rapid commercial application.

This Center represents an outgrowth of a long history of university/industry cooperation in Washington State, most recently in the advanced technology area. It is a partnership which, I believe, should be encouraged through legislation such as S. 2165 and H.R. 4475.

Mr. Chairman, that concludes my testimony today. Once again, let me take this opportunity to thank you and the Committee for its leadership in this area. I very much appreciated the opportunity to testify before it today.

Senator **Durenberger**. Senator Danforth.

Senator **Danforth**. Thank you, Mr. Chairman.

Gentlemen, thank you very much for excellent and very persuasive testimony

One of the key issues, I guess the most significant issue, that will be before us is whether to make the extension permanent or to make it for a period of 3 years.

My understanding of the position taken by the business community and by the academic community is that it is very important to make the extension permanent, that business and academia have to look ahead for more than a period of 3 years to plan research and development activities.

I think that both of you have testified as to the importance of a permanent extension, but I would like you to reiterate, if you would, or state your views as to the importance of a permanent extension.

Mr. **Zschau**. Yes. In the statement I just made, I touched on that. Even though we weren't doing basic research or we weren't making breakthroughs, if you will, in the electronics area, most of the development programs that we undertook were of a 3 to 5 year duration. Major developments are even more important than the ones that my small company was doing. You can't motivate that kind of behavior with a temporary tax credit. If you believe in the importance of research and development, and you believe in the risk-taking associated with major development programs, you've got to have a permanent tax credit.

If you are not quite sure, then maybe we shouldn't have it at all, but a temporary tax credit does not motivate the kind of behavior that is necessary for this country to maintain its industrial competitiveness.

Mr. **Chandler**. I would just like to underscore it. That is certainly the testimony that I hear from the electronics industry in our area. Many people think that our area is only Boeing—well, it's not. Physiocontrol has developed very important lifesaving equipment dealing with the heart; and other electronic firms there—Sunstrand, among them—all of them tell me, if you are only talking about 3 years, you are simply not going to get the job done. The planning and the commitment must be for much longer than that, and I just wanted to endorse my colleague's statements that it should be made permanent.

Senator **Durenberger**. Thank you both very much.

Senator Mitchell.

Senator **Mitchell**. No questions, Mr. Chairman.

Senator Chafee.

Senator **Chafee**. Thank you, Mr. Chairman.

I have a statement I would like to insert in the record, if I might.

Senator **Durenberger**. Without objection, it will be made a part of the record.

Senator **Chafee**. And I want to compliment the Representatives, particularly Mr. Zschau. We have heard him here before testifying in connection with these efforts to encourage the high tech industry. And we appreciate the zest and energy that he has put into it.

I believe you have a group over there in the House that is devoted to this effort that you have headed. Is that not correct?

Mr. ZSCHAU. Yes, Senator Chafee. We have a task force on the Republican side that has 138 members who are focusing on the issues of industrial competitiveness and high technology innovation. We will be releasing shortly a rather complete legislative agenda, specific initiatives that we think are important to maintain our industrial competitiveness and enhance our technological leadership.

S. 2165 is specifically one of those initiatives that we think is among the most important.

Senator CHAFEE. Well, Mr. Chairman, in this subcommittee we have had a lot of testimony on this topic. We had our first hearings in January of 1983; at that time, Mr. Zschau and the AEA, the American Electronics Association, chose the extension of the R&D tax credit as the single most important piece of legislation on its agenda.

So it is an important piece I look forward to getting on with it, and I hope Treasury will approve it.

Thank you.

Senator DURENBERGER. Thank you.

Gentlemen, thank you very much.

Mr. ZSCHAU. Thank you, Mr. Chairman.

Mr. CHANDLER. Thank you.

Senator DURENBERGER. Our next witness is the Honorable John E. Chapoton, Assistant Secretary for Tax Policy, Department of the Treasury.

Welcome, Buck.

STATEMENT OF HON. JOHN E. CHAPOTON, ASSISTANT SECRETARY FOR TAX POLICY, DEPARTMENT OF THE TREASURY, WASHINGTON, DC

Mr. CHAPOTON. Thank you, Mr. Chairman.

I've got a rather lengthy statement, and I will attempt to summarize it. I will summarize it, briefly, but I want to spend most of my time on the definition of the credit. I think that is the point that we spent a lot of time on and that I think is of interest to the subcommittee.

I want to stress that several of the points I make are still under active review in our Department. We may be furnishing further views to the subcommittee at a later time.

We have testified before this subcommittee many times on this subject. We made the point before that a business will invest in R&D to the point where the expected return on the investment is equal to the return on other investments but that the profit motive may not lead to socially optimal levels of R&D because a private investor may not enjoy the full return realized from his innovations. To the extent that the market fails to reward the efforts, then we think government may be appropriate for R&E, particularly appropriate for basic research, but it is appropriate for research beyond that generally termed "basic."

We have in the law now, adopted in 1981, section 44F, which gives a tax credit equal to 25 percent of qualified research expenditures over those expenses during a base period, being a 3-year base period preceding the current year.

The legislative history of the credit indicates that you are supposed to let the existing definition under section 174 to determine what was the research or experimentation, but when we looked at 174 we found no precise definition. In many cases under that law, which allowed a deduction only, the taxpayer would have had a deduction either under the 174 or section 162 as an ordinary necessary business expense, so there wasn't much attention on that definition.

We thus had a case where there was a vague definition under existing law that did allow taxpayers to assert that the cost of developing virtually any product qualified for the credit.

We had some little experience with the credit now; we have been able to analyze pretty thoroughly the 1981 returns. The credit became available for investment, R&D expenses, after July 1, 1981.

Our sample of tax returns indicates that 12,300 corporations reported $3.4 billion of qualified incremental R&E expenditures on their 1981 returns. They claimed $858 million of R&E credit.

Of the total amount, half went to 53 companies which reported $2.3 million of credit. This shouldn't be surprising; these are all very large companies and all have very large R&D budgets.

The credit also went to companies outside of manufacturing and utility areas. About one-third of the companies in the 1983 returns had principal lines of business outside of those areas. These companies were the trade, service, and financial sectors, and they claimed growth in qualified R&E from 1980 to 1981 of some 91 percent.

Taxpayers in other industries also claimed the credit in 1981, businesses such as fast-food restaurants, baked goods, home building, publishing, banking, stock brokerage, and movie production. All claimed the credit.

I think it is pretty clear that we have some cases far from the high technology research area.

S. 2165 is an effort to narrow the scope of the present credit by adopting a new definition of "qualified research." We think S. 2165 represents an improvement over existing law, but we have some concerns about how the bill defines "new or significantly improved" business items which would qualify for the credit. And unless this definition is narrowed to confine it to items which in fact are new and significantly improved from the technological standpoint, we could not support the definition in S. 2165.

Let me look at the terminology used in 2165. It could result in an extremely low threshhold for the credit, which would enable taxpayers to claim the credit for virtually all preproduction expenses as qualifying for the credit. If this occurs, the credit will apply to an overly-broad range of activities and thus will be an ill-effective tool in encouraging innovative research and experimentation.

The critical definition is of the words "new" and "significantly improved." We think, as we read the legislation and as we discussed it with some of its supporters, this definition will exclude only purely stylistic changes. We believe even trivial functional improvements would qualify.

We point out in our testimony some examples that we think would qualify under the bill. Development of products which involve no technological innovation, or development of products that incorporate well established, known technology might well qualify for the credit under the bill.

We think that to provide various incentives or increased levels of innovative R&E, the definition of "research" and "experimental" should be targeted to truly innovative activities. We believe the intended credit as an incentive will be dissipated if products designed to produce any functional improvement receive the credit.

We suggest that the expenses associated with an activity should qualify for the credit only if, as of the time the taxpayer commences the activity, the taxpayer intends to achieve a significant technological improvement in a business component.

We would focus on the business component, that is the most basic element or component part of a product or process, with respect to withdrawing the activities undertaken, to see if the required substantial technological improvement is found.

If all the activities relating to the entire product or process, then the entire development cost of the entire product would be creditable; but, if the R&E activities are undertaken to produce substantial technological improvement only with respect to a component part, and the taxpayer incurs more than an insignificant amount of non-R&E development costs with respect to other aspects of the product or process, and only the R&E costs related to the component would be eligible for the credit.

We think that focusing on the particular component which is substantially improved would prevent routine product development costs from qualifying for the credit. We give an example in the testimony that if a taxpayer were going to develop a new personal computer, but combines existing widely available component parts in the development of the computer, except that he develops an entirely new type of screen which would cause less eye strain and produce better graphics, and incurs substantial R&E expenditures in the development of the screen and substantial engineering costs in combining the various parts in developing the new computer, we would think that the cost of developing the entire computer would not qualify for the credit, but the cost of the substantial improvement in the screen would qualify for the credit.

In determining how you define or how the taxpayer knows whether he is setting out to make a significant technological improvement, we think that it will be necessary, unfortunately, to examine all of the facts and circumstances of a case. It is difficult to determine precisely the proper scope of the credit, but we think it is possible to articulate factors which tend to indicate whether or not the taxpayer sought a significant technological improvement.

One factor we think should be conclusive; that is, if it can be shown that the taxpayer faced a substantial risk that the technology result that he sought could not be achieved, then that, in all events, should make the costs involved creditable. And that determination should be made with respect to each component of the product.

But even where there is no clear showing that a substantial technological risk is present, but factors could indicate that the taxpayer sought a technological improvement and therefore the credit would be available, we list factors such as the taxpayer showing that he sought a meaningful functional improvement in a business component over existing state-of-the-art. And we would intend here to differentiate between development costs associated with routine or trivial improvements, or a mere imitation of products of other taxpayers, from the cost incurred to obtain a meaningful functional improvement.

Moreover, we think it ought to be made clear that the qualifying improvements could be sought over a time in a series of steps. We recognize that improvements in the state of the art may take place in one major change, or over the course of a relatively short period of a series of minor functional improvements which, when viewed as a whole, constitute a meaningful functional improvement. And that cumulative process should qualify for the credit.

Another favorable factor would be that the taxpayer sought a significant reduction in the cost of producing a product.

A third favorable factor could show that the taxpayer's activity involved experimentation in a laboratory or in a scientific sense. We think the existence of that type of experimentation as opposed to routine engineering activities would indicate the taxpayer intended to achieve a significant technological improvement in the business component.

By contrast, other factors would indicate that the taxpayer did not seek a significant technological improvement, for example, if he were undertaking activity primarily for a routine, cosmetic, or nontechnological alteration of an existing product, production line or manufacturing process, or other ongoing operations. This would indicate that he did not seek a significant improvement.

Similarly, if the taxpayer's uncertainty relating to the success of the product were related primarily to the existence or possible changes in market conditions, this would be an unfavorable factor.

If the taxpayer sought to merely replicate an existing product using a process which is known, or set out to combine existing items the capabilities of which are known, this also would be a factor.

We recognize that this type of approach would not be without administrative difficulties, but I think we are just going to have to understand that administrative difficulties are going to be inherent whenever we try to define activities eligible for special tax treatment.

The "functional improvement" standard in S. 2165 would likely be a somewhat easier standard to administer than that which we are proposing, but it fails to distinguish between innovative R&E activities and routine development activities. And under S. 2165, therefore, the credit would provide no incentive to the activities we all wish to encourage. If the credit fails to provide the intended incentive, we have merely succeeded in reducing tax revenues, not in encouraging innovation.

So, Mr. Chairman, that is a thumbnail sketch of the approach we would like to take to the definition of the qualifying activity for the purposes of the credit. It does take further work, and we would like to with the subcommittee and the staff in developing that approach.

We are, as you know, supporting an extension of the credit. We are talking about a 3-year extension, and we recognize the point that Senator Danforth has made. We do think the credit is still new enough that we do need to revisit it this time, and indeed we are going to have to revisit it or at least reexamine its success at some later point.

I will just tick off some of the other items in the bill. They are the provisions relating to startup companies and joint ventures, and we make the point in our statement that we can support clarifying changes with respect to both of these areas, provided the changes do not undermine the incremental feature of the credit which we think is important.

The bill would also allow as qualified research expense depreciation on equipment used in research. We do not support that. We think that the present rules, ACRS rules, provide sufficient incentive for the purchases of equipment, generally.

Let me turn to the provisions of the bill relating to the expansion, promotion of university research, and scientific education.

Under current law, 65 percent of the amount a corporation contributes to universities and certain other qualifying organizations to conduct basic research are treated as contract research expenses and qualify for the credit. Section 201 of the bill before you would create a new credit equal to 25 percent of a portion of payments to universities and these other organizations for basic research, if they exceed a fixed maintenance of effort floor based on contributions toward that end for the period 1981 through 1983. We understand that the purpose of this section is to eliminate disincentives in current law to funding multiyear basic research projects. We support that purpose, and we want to work with the committee to find an effective solution. We do think there is a problem here. We are suggesting we simply have a straightforward change in the law, which would provide that the total R&E credit with respect to multiyear funding commitments should not be reduced below the amount of the credit that would have been available had the contributing company made the contribution all in 1 year. We think that would be a straightforward approach and would solve the problem.

And then there are a series of changes in the bill relating to contributions of scientific and technical property for use in scientific education. Basically, these provisions relate to an exception in the current law. The current law provides that a charitable deduction, a gift of property for charitable purposes, would not qualify for a full fair market value deduction if a sale of that property would produce ordinary income. In that event the general rule is that the taxpayer is limited to his cost basis in the property donated.

There are two exceptions to that rule now. One is the case of gifts used for the care of the ill, needy, and infants. The second exception, which this bill would expand, applies to corporate contributions of scientific equipment and apparatus to certain institutions of higher education.

Senator CHAFEE. Mr. Chapoton.

Mr. CHAPOTON. Yes, Senator Chafee.

Senator CHAFEE. I have to go briefly to another meeting. I just wanted to ask you a couple of questions connected with S. 2165, the first part.

Are you saying to us that this is complicated, that you've got to get further definitions, and therefore, you are recommending just a 3-year extension from the expiration date of 1985?

Mr. CHAPOTON. We are recommending a 3-year extension and a revised definition of "qualified research."

Senator CHAFEE. Well, this is troublesome, because we have been thrashing around with this for quite a while. Why are we going to be any better off with just a 3-year extension? Do you think in the interim you will be able firm up some of these definitions?

Mr. CHAPOTON. Senator, I think we should firm up the definitions in the 3-year extension, and then the 3-year extension would cause a review of whether the credit is working effectively.

There is a lot of thought, not reflected in our testimony, on the unavailability of the credit—whether the credit is going to the proper companies. Like most tax benefits, it doesn't provide as much benefit to the companies that don't have tax liability currently, like start-up companies. And a lot of the innovative companies fall into that category.

Senator CHAFEE. Well, obviously it is not perfect.

I guess you heard me mention before, we had the American Electronics Association here testifying, and, while they probably do represent your more established companies, they have put this at the top of their list of all legislation before the Congress as being the most beneficial to them in this competitive effort they are involved with—namely, the companies abroad.

I am just not sure. I don't see the rationale. Assuming that we can agree in some way with the Treasury with their definitions, what do we gain by the 3 years extension? They are testifying later on today and I know they are going to testify that this doesn't give them enough certitude.

Mr. CHAPOTON. Yes, we have heard that argument. We recognize that point. The only point in limiting the extension is to make sure we don't pass this and not look at how it's working. Three years is not magic, but to make it permanent would run the danger of not reexamining it, and I think it ought to be reexamined. We ought to review this very significant subsidy for this type of activity.

Senator CHAFEE. Well, I know when we passed it a couple of years ago certainly it wasn't our intention to help fast-food enterprises, but I suppose something like that always happens. The question is whether we kill off the whole thing.

Mr. CHAPOTON. We do not suggest that. Let me emphasize that I want to be very careful that we don't appear too negative. I mean, necessarily, we have some concerns about the workings of it now, and we have some concerns about the definition that the groups that you are suggesting are proposing. But let me say that we are a lot closer together than we were a few months ago. They recognize that the definition ought to be restricted in certain fashions.

I just would repeat: If we don't target this type of incentive, then we really haven't achieved any purpose; we have just had a tax reduction.

Senator CHAFEE. Well, I think the objective of the committee is to target it.

Mr. CHAPOTON. I think so, too.

Senator CHAFEE. One other quick question.

One of the problems that they have mentioned in testifying before us in the past is the abuse with the software. Is that now being straightened out? They have had conversations with your Department in connection with that.

Mr. CHAPOTON. Well, the software—we treat software under this like all other expenses. It could qualify for R&E as well as any other expense.

I do say, and I've said before, that I think in our proposed regulations we were a little too restrictive on software. It was singled out because part of the legislative history singled out software. We, frankly, have focused on the legislative effort before we have gone back to the proposed regulations. But we are thinking that the cost of developing software ought to be treated like the cost of developing any other product.

Senator CHAFEE. Well, we will listen carefully to what they say as far as how long a period. It has always astonished me that they have chosen to put such emphasis on R&D credits this year, when they know it is not going to expire until next year. But they have chosen this as their No. 1 target despite the fact that there is a series of other legislation, as you know, before not necessarily this committee but before Congress.

So I think we have got to give some weight to that.

Mr. CHAPOTON. Well, we would certainly agree that it ought to be extended this year, because we are running up to the deadline, and clearly plans are being made that would be into 1986.

Our sole purpose in not having an unlimited extension is to cause reexamination of how it works.

Senator CHAFEE. Thank you.

Senator DURENBERGER. Buck, are you going to finish your testimony on the other two bills?

Mr. CHAPOTON. Yes, and I will make it quite brief.

I was discussing the aspect of this bill, which relates to gifts of scientific equipment for research. Let me just tick off the particular provisions of that section of the bill and how we come out on them.

Basically, we support this portion of the bill. We think it would make the enhanced deduction—which was adopted in 1981 for contributions of scientific equipment—make that provision work in the manner it was originally intended by Congress.

Specifically, the donations of software would be included under the enhanced deduction; we would support adding software to the items that could qualify. We think that encourages donors to provide the recipients with fully operational systems, that that is advisable, and that is frequently going to require a software component to make the equipment usable.

With respect to the eligible use of scientific equipment to direct education of students and faculties as well as research, we would not oppose this change in the permissable use of the equipment. We recognize that the current restriction to research and research training causes administrative difficulty and may lead to uncertainty among both the donors and the recipients with respect to the distinction between research training and direct education.

The bill does go further and would expand not only the eligible use of the equipment in disciplines now permitted, but it would expand the disciplines in which the equipment could be used to training in scientific and physical, biological, computer, and engineering technologies. We think the original intent was to stimulate gifts to be used in scientific research activities in the basic sciences. We think that to expand it to other disciplines outside of the basic sciences, such as computer sciences, would be a significant increase in the scope of the enhanced deduction. If you expand it beyond the basic sciences and that very specific purpose for which it was originally intended, we don't see any logical restraint against providing the benefit to all gifts to educational institutions or indeed all gifts of property to charity. So we will oppose that portion of the expansion of the enhanced deduction.

We favor the safeguards in the bill that are designed to ensure that only high quality state of the art equipment is eligible for the enhanced deduction. For example, the bill requires that the property be contributed within 6 months of assembly. We think that is a good approach. Moreover, we would suggest that, with some technical modifications, we would not oppose the provision of the bill that would broaden the definition of the property manufactured by the donor to include property that has been assembled by the donor.

Current law—we think inappropriately—has prevented corporations who subcontract part of their manufacturing process from availing themselves for those products of the enhanced deduction. So we would support that change.

We also would not oppose the provision of the bill that would allow the corporation to obtain the enhanced deduction for contributions of scientific equipment used in the trade or business. The bill requires the property be contributed within 3 years after it was first placed in service. We are suggesting that maybe 3 years is too long a time between the date of the purchase of the equipment and its contribution. It would perhaps undermine the purpose of the bill to require state of the art.

And finally, we would strongly oppose the provision of the bill that would permit an enhanced deduction for a contribution of certain service contracts. Under current law there are no such provisions relating to contributions of services, allowing the full fair market value of the deduction. We have always opposed any efforts that have been made to allow full fair market value contributions for contributions of services. Congress has always rejected those requests, and we think that this is not an appropriate time to change that policy.

We question, once you start down that road, how you can distinguish these types of services from others. For example, how would you deny the deduction for gifts of doctors' services to hospitals?

I would also point out that the provision of the bill would allow contributions of replacement parts for scientific equipment to qualify for the enhanced deduction, we are going along with. We hope that that would take care of the problem, and that you would not need to expand it to gifts of services.

Also, Mr. Chairman, the bill provides, specifically provides, that student scholarships, fellowships, grants, and student loan forgiveness does not cause taxable income. We support the provisions of the bill in this regard and see no reason to limit this treatment solely to science and engineering students. We think that any such grants that are forgiven they are essentially noncompensatory—and the restrictions in the bill do limit it to noncompensatory situations—and so we think it might well be broadened.

The companion bill, S. 1851, deals with several modifications, numerous modifications of private foundations. Let me just mention two of them, Mr. Chairman.

We generally, let me say, are satisfied. These are a number of changes which would loosen in certain respects the provisions of the Tax Reform Act of 1969, imposing restrictions on private foundations, on disqualified persons with respect to private foundations, and on gifts of donors to private foundations.

The most important provisions, from the standpoint of the foundation community, relate to gifts to private foundations. They would like to remove what in current law limits the gifts to private foundations to 20 percent of adjusted gross income whereas gifts to other public charities may go up to 50 percent of AGI, and gifts of appreciated property if made to a private foundation by a donor, he is limited in his deduction to his basis in the property; whereas, generally speaking, gifts of capital gain property to a charitable foundation result in a full fair market value deduction.

We are taking the position and took the position on the House side that the distinction between gifts to private foundations and public charities is appropriate. We think the basic policy of a preferential treatment for like-kind contributions to public charities should remain in the law. Evidence has been submitted to us that this has an adverse impact on private philanthropy, but we have not seen any evidence where we think overall there is any diminishment in charitable giving. And indeed we think, as I stated, that a distinction between gifts to private foundations and public charities should remain in the law.

H.R. 4170 in the House would make some changes in this regard, though, and we can support those changes. Basically, it would increase 20 percent AGI limits, 30 percent in the case of contributions to private foundations of cash and ordinary income property, and we do support that. Also, it would allow donors to receive the fair market value deduction for contributions of appreciated property given to a private foundation where the property is of a type that fair market value quotations are readily available on an established security exchange. We do support that provision.

So there are two liberalizations in the House bill with respect to gifts to private foundations, and we would support both of those.

I think I will not attempt to go through the balance of the details of the provisions on gifts to private foundations. We have testified on this subject in the House and in our written statement here. It goes into quite a bit of detail.

Mr. Chairman, I will conclude there. The other hearing today relates to S. 1758, which is the open-ended accounts. Perhaps I can just summarize that by saying that there are a lot of benefits changing from a depreciation system which utilizes open-ended accounts as contrasted with the ACRS vintage account system which we adoped in 1981.

In our written statement we list some of the benefits of going to open-ended accounts, but we cannot support such a change now. There are a lot of detriments to using open-ended accounts as contrasted with the present ACRS system, a lot of detriments we think to the taxpayer and to the Government alike, but basically we think we really shouldn't consider such a basic change this quickly after we adopted the wholesale revision of the depreciation provisions in the law in 1981.

It would require another period of uncertainty; it would require another set of interpretative regulations. And we think it is far too early to revisit that.

So let me just make that summary of our position on that bill, and I will conclude my statement. And I would be happy to answer any questions on any of these provisions.

Senator DURENBERGER. Thank you very much.

[Mr. Chapoton's prepared statement follows:]

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STATEMENT OF THE HONORABLE JOHN E. CHAPOTON
ASSISTANT SECRETARY (TAX POLICY)
DEPARTMENT OF THE TREASURY
BEFORE THE
SUBCOMMITTEE ON TAXATION AND
DEBT MANAGEMENT
SENATE COMMITTEE ON FINANCE

Mr. Chairman and Members of the Subcommittee:

I am pleased to have the opportunity to present the views of the Treasury Department on S. 1758, relating to cost recovery for certain personal property. In general, for most machinery and equipment, S. 1758 would replace the item-based recovery method presently provided under the Accelerated Cost Recovery System (ACRS) with a system based on use of open-ended accounts. In addition, for property covered under the open-ended account system, S. 1758 would require no basis adjustment for investment tax credit (ITC) allowed. The bill would also extend the ITC qualified progress expenditure (QPE) rules to cost recovery deductions for property recovered under this new system.

For reasons I will set forth below, the Treasury Department cannot support S. 1758.

Background

To put in perspective the issues presented by this bill, I believe that some background would be useful.

In 1981, the enactment of ACRS changed significantly the rules for recovering the cost of machinery and equipment. Under ACRS, such property is assigned to one of four recovery classes with a prescribed recovery period (3, 5, 10, or 15 years). Statutorily prescribed rates, generally approximating use of the 150 percent declining balance method, are applied to the original cost to determine the allowable deduction. A limited degree of flexibility is provided to taxpayers to use straight-line instead of ACRS recovery. A 6 percent ITC is allowed for property in the 3-year class, and a 10 percent ITC is allowed for eligible property in the other ACRS classes. As provided by the Congress in 1982, the depreciable basis of property is reduced by one-half of the ITC allowed. As an alternative, taxpayers may elect to reduce the amount of ITC by two percentage points.

Under ACRS, cost recovery is determined by reference to the year an asset is placed in service for business use. All property in a recovery class which is placed in service in a given year must be accounted for consistently.

Under the generally applicable tax rules, the disposition of machinery or equipment, such as by sale or exchange, is generally a taxable event. Thus, gain or loss is recognized, measured by the difference between the amount realized and the adjusted basis of the property sold. The usual recapture rules of section 1245 apply, requiring inclusion of realized gains as ordinary income to the extent of previously allowed ACRS deductions. Gain in excess of prior ACRS allowances is generally taxed at capital gains rates. Disposition of property may also result in recapture of the ITC. Special rules apply to the recovery and disposition of mass assets if so elected by the taxpayer.

S. 1758

S. 1758 would change the ACRS and ITC rules in a number of respects. First, instead of individual asset accounting, a system of open-ended accounts would be established for 3- and 5-year property. Under an open-ended account system, each year's investments are added to, and each year's dispositions subtracted from, the account, and the deduction is determined by applying a prescribed percentage to the year-end account balance. The deduction so determined, in turn, reduces the account balance as of the beginning of the following year. Under the bill, the prescribed rates of recovery are generally based on use of the 150 percent declining balance method, and the 3- and 5-year recovery periods provided under present law. Thus, the prescribed rate for the 3-year account is 50 percent, and for the 5-year account is 30 percent.

Under an open-ended account system, gain or loss is not recognized on the disposition of individual assets. Instead, the account is reduced by the amount realized, with the result that recognition of gains and losses is deferred by reducing or increasing cost recovery deductions in the year of disposition and subsequent years. Under S. 1758, gains are recognized (generally as capital gain under section 1231) when the account balance falls below zero -- *i.e.*, when the amounts realized from dispositions and prior deductions exceed the amounts added to the account. Special rules are provided for carryover basis transactions, like kind exchanges and involuntary conversions, and certain adjustments under the partnership provisions.

S. 1758 allows substantial flexibility in the determination of the recovery allowance. First, taxpayers are permitted to assign to the 5-year account (with an increased ITC) property otherwise assigned to the 3-year category. Also, in determining the annual recovery deduction for property in each account, taxpayers may use any percentage between the percentage otherwise applicable (*i.e.*, 50 percent for the 3-year account and 30 percent for the 5-year account) and one-half of that percentage (*i.e.*, 25 or 15 percent, respectively). This election may be made on a year-by-year basis, with the result that a lower recovery in one year may allow a higher recovery in later years.

Additionally, under S. 1758 no basis reduction would be required to reflect ITC allowed with respect to property to which the open-ended account system applies. Thus, property in the 3- and 5-year classes would generally be entitled to a 6 or 10 percent ITC, respectively, with a full basis for cost recovery purposes.

Finally, S. 1758 differs from ACRS in that it permits the recovery of certain expenditures made before the property is placed in service. Presently, under section 46(d) of the Code, taxpayers are permitted to claim the ITC on so-called "qualified progress expenditures" (QPE's). Generally, QPE's are expenditures made with respect to property constructed by or for the taxpayer which has a two-year (or longer) construction period. S. 1758 would extend the QPE rules to allow cost recovery deductions as well as the ITC for property recovered under the open-ended account system.

Discussion

The principal goal of S. 1758 is to simplify the method of determining cost recovery deductions by utilizing open-ended rather than individual asset accounts and by eliminating the ITC basis adjustment. The Treasury Department strongly supports simplifying the tax laws to the greatest extent possible.

Further, we recognize that S. 1758 would, in many respects, simplify the present system of cost recovery. We also note, however, that open-ended accounts would change substantially the method of depreciation accounting established in 1981. Before such a change can be justified, two conclusions must be reached: (1) that the present system is too complex; and (2) that the simplification provided by S. 1758 would be so substantial as to warrant a dramatic change in that system at this time. We do not believe that either of these conclusions can be sustained.

First, we do not believe that the present asset-by-asset accounting system provided by ACRS is overly complex. Compared to the depreciation system it replaced, ACRS accounting is relatively simple. Generally, for cost recovery purposes, the taxpayer needs to know only the year a particular asset is placed in service, and the cost of that asset. Recovery deductions are determined simply by applying the statutory percentages to that cost. In addition, under ACRS, all assets within a class that are placed in service during a taxable year generally can be treated as a single item. Further, for small business, present law provides additional simplification by allowing a limited amount of yearly investment (presently $7,500) to be expensed immediately with no ITC.

Under ACRS, taxpayers must account for dispositions on an asset-by-asset basis. We do not believe that individual asset accounting is unduly burdensome for those assets that are easily identifiable by the taxpayer. For assets which are not easily identified, a simplification feature is built into the system. Thus, ACRS allows recovery of "mass assets" to be determined on a collective basis without recognition of individual dispositions. If mass asset treatment is elected for qualifying property, all proceeds received from the sale of an asset are taken into income, and recovery of the mass asset account continues as if the asset were not disposed of.

One feature of the present recovery system that may be complicating is the reduction in basis for one-half of the ITC. Even with the basis adjustment, however, we believe that ACRS is relatively simple in operation. Further, the basis adjustment rules generally became effective only for property placed in service after 1982. In order to assess fully their complexity, an opportunity should be provided to see how they operate.

We also are not convinced that open-ended accounts will achieve enough additional simplification to justify revision of the present cost recovery system at this time. Indeed, any change of this type itself will cause significant complications during a transition period. If S. 1758 were enacted, taxpayers would be required to compute cost recovery deductions and account for dispositions under three separate systems: (1) prior law for pre-1981 property; (2) ACRS for property placed in service in 1981 and 1982; and (3) open-ended accounts for property placed in service after 1982. Even if open-ended accounting were used only at the taxpayer's election, complexity would result in that taxpayers would be forced to decide which method is most beneficial. Further, the administrative rules implementing the systems might not be in place when elections are required to be made.

More basically, however, ACRS is less than three years old. Taxpayers are only now beginning to become experienced with this new system. We fear that changing the rules again would only confuse taxpayers who must adapt to yet another new system. Certainty and stability in the law can be important components of simplification. Conversely, change, by its nature, often adds undue complexity.

The principal simplification feature cited for open-ended accounts is that it dispenses with the requirement to account separately for dispositions of individual assets. We believe that this aspect of simplification may be overstated. Even under open-ended accounts, taxpayers still will be required to keep track of individual asset dispositions for purposes of determining ITC recapture (if any). Thus, taxpayers still will need to know the date an asset is placed in service, its original cost (so as to determine the credit claimed), and the date of disposition. The only additional elements necessary for determination of gain recognition are the amount realized, the asset's adjusted basis at the time of disposition and, correlatively, the cost recovery previously allowable on that asset. Under ACRS, these are not difficult items to determine.

Additionally, under open-ended accounts, dispositions other than by sale or exchange may not be handled easily. For example, when a portion of an account is transferred in a carryover basis transaction (as may occur, for example, in an incorporation under section 351, a corporate division under section 355, or a transfer to a partnership under section 721), the account is divided between the transferor and transferee based on the relative fair market values of the transferred and retained assets. Similarly, if property is distributed by a corporation to its shareholders, for example, as a dividend or in redemption of stock, the account must be reduced by the value of the assets distributed. Other dispositions of property, such as by transferring to a supplies or scrap account, also cause the account to be reduced by the fair market value of the transferred property. The required valuations may prove complicated and, being factual determinations, may lead to disputes between taxpayers and the IRS. In other cases, separate accounts may be necessary to reflect certain adjustments under the partnership provisions, which also may be complex. Indeed, ACRS seems to accommodate many of these types of transactions more easily than does S. 1758.

Another advantage cited for the open-ended account system is that it will reduce the number of accounts required to be maintained by taxpayers. Presently, under ACRS (in the absence of a straight line election) a maximum of eight accounts are necessary for property in the 3- and 5-year classes. Under S. 1758, two accounts will be necessary. However, under both ACRS and open-ended accounts, each year's investments must be accounted for. Indeed, under S. 1758, taxpayers will be required to keep track of additions for two years since, under the half-year convention provided by the bill, one-half of the investment is taken into account in the current year and the other one-half in the subsequent year.

In addition, the flexibility features of S. 1758 may result in complexity. Under S. 1758, a taxpayer has two flexibility choices: (1) to assign 3-year property to the 5-year category (with a 10 percent ITC); and (2) to choose any applicable percentage between the percentage otherwise applicable and one-half of that percentage. These flexibility features may prove troublesome. The mere existence of the choices may prove complicating for small businesses, which may not have the resources to determine the optimal combinations. Indeed, it was the numerous elections and methods of depreciation provided under prior law which resulted in the complexity that ACRS was designed to reduce.

We have a number of other concerns regarding the ability of taxpayers to choose the applicable percentages. First, taxpayers would be able to determine on a yearly basis the optimal cost recovery deduction so as to utilize more fully the benefits of other tax provisions. For example, since the amount of foreign tax credit available to taxpayers depends on the United States tax paid, the flexibility to delay cost recovery deductions may lead to undue planning opportunities. Similarly, if a corporation is eligible for the alternative tax on capital gains, the flexibility to limit the recovery deduction may allow use both of that lower tax rate and the recovery deductions in later years. Further, the flexibility to determine the annual deduction violates the annual accounting principle, which is a basic element of our tax system. Moreover, we question whether such elective treatment could be allowed only for cost recovery and not for other deductions or income items.

We also see a problem in the avoidance of the recapture rules under S. 1758. Under the bill, when an account balance drops below zero, the negative amount is taxed as income realized under section 1231(a) -- generally capital gain. In many cases, that gain should be taxed as ordinary income pursuant to the general recapture rules of section 1245. To illustrate, assume the simple case of an account containing a single asset, with an original cost of $100, accumulated cost recovery of $70, and a resulting balance of $30. The asset is sold for $50, resulting in a negative balance of $20. Under the bill, the $20 is taxed as capital gain. However, in this example, that amount represents the recovery of ordinary income deductions taken in prior years and should be taxed at ordinary income rates. Thus, under the bill, taxpayers would have increased opportunities to convert ordinary income into capital gains. Further, the ability of a buyer to claim ordinary income deductions on a full asset basis, while the seller is taxed only at capital gains rates, could lead to the "churning" of assets to obtain tax benefits. These conversion and churning possibilities could lead to increased tax shelter opportunities.

In addition, we question the extension of the ITC rules for qualified progress expenditures (QPE's) to cost recovery deductions. Generally, our tax system attempts to match deductions with the income to which those deductions relate. While ACRS departs from this principle to some extent by providing accelerated deductions, ACRS still requires assets to be producing (or available to produce) income before recovery may begin. Many of the features of ACRS, and other provisions of the tax laws, are based upon the principle that deductions may not begin until income is generated. For example, the short taxable year rules of section 168(f)(5) are designed to deny ACRS deductions attributable to periods before an asset is in service. Similarly, section 189 of the Code provides for the capitalization of otherwise deductible interest and taxes incurred during the construction period of real property, and requires the amortization of the capitalized amounts generally after the property is placed in service. In the case of certain special amortization provisions applicable to start-up or organizational expenditures (e.g., sections 195, 248, and 709 of the Code), amortization does not commence until the business begins. We do not believe that a special exception to this principle should be provided for cost recovery deductions. Further, a number of tax shelters have as their basis the acceleration of deductions relative to the related income. Again, extending the QPE rules to cost recovery deductions may result in increased tax shelter opportunities.

For these reasons, we cannot support S. 1758. While the system of open-ended accounts provided under the bill might simplify accounting for cost recovery deductions in some cases, we do not regard the simplification to be so substantial as to justify such a significant revision of the ACRS system at this time.

I will be pleased to answer any questions that you may have.

For Release Upon Delivery
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February 24, 1984

STATEMENT OF THE HONORABLE JOHN E. CHAPOTON ASSISTANT SECRETARY (TAX POLICY) DEPARTMENT OF THE TREASURY BEFORE THE SUBCOMMITTEES ON TAXATION AND DEBT MANAGEMENT AND SAVINGS, PENSIONS, AND INVESTMENT POLICY OF THE SENATE FINANCE COMMITTEE

Messrs. Chairmen and Members of the Subcommittees:

I am pleased to have the opportunity to present the views of the Treasury Department on S. 2165, the "High Technology Research and Scientific Education Act of 1983." This testimony represents the current thinking of the Treasury Department with respect to S. 2165. I want to stress that several of the points that I will be discussing are still under active review. For this reason, the Treasury may provide the Committee with additional views at a later date. I also will present testimony on S. 1857 which would modify certain tax provisions relating to private foundations.

S. 2165

High Technology Research and Scientific Education Act of 1983

Title I of S. 2165 would make permanent the tax credit for research and experimental ("R&E") expenses. In addition, it modifies the definition of expenses that qualify for the R&E credit. Title II would provide a separate tax credit for contributions to universities and other qualifying institutions to conduct basic research, provide an enhanced deduction for contributions of scientific equipment and related services to educational institutions and provide special tax treatment for scholarships, fellowships, and student loan cancellations for post-graduate degree candidates in engineering and science.

Improvement and Extension of R&E Credit

Background

Objectives of the Credit. Congress enacted the tax credit for incremental R&E expenditures to encourage industry to undertake the R&E activities that may lead to productivity enhancing innovation. The need for such activities is clear: innovation is essential if the United States is to retain and improve its competitive position in the world economy. The Administration remains strongly committed to encouraging the innovative R&E efforts which are critical to the strength of this country's economy.

"R&E" is a term used to describe a broad range of organized activities which firms undertake ranging from basic research, which is conducted without the expectation of producing any marketable product, to the final design of a product being prepared for sale. Commercial and industrial research leading to technological innovation, which also is referred to as "R&E", is unquestionably beneficial to the economy. The more successful innovative R&E effort in the economy, the higher will be the rate of productivity growth.

As we have testified before this Committee previously, a business will invest in R&E to the point that the expected return on investment in R&E is equal to the expected returns from alternative investments. However, the profit motive may not lead to socially optimal levels of R&E because the private investor may not enjoy the full return realized from the innovation. If a business invents a new type of product, or "builds a better mousetrap," imitators will appear and share the profits to be realized from this innovation. This will occur in many cases despite the fact that a business patents a new product or attempts to keep an innovative process secret. To the extent the market fails to reward businesses adequately for innovative R&E, businesses undertake less than optimal levels of R&E. For this reason, government subsidies for R&E may be appropriate.

Broad government support of R&E is particularly essential in the area of "basic research." Basic research is an activity principally intended to provide additions to knowledge that do not have specific commercial objectives. Basic research cannot be self-supporting. Because the substantial benefits from basic research are available to society generally and one person's use of the results of basic research does not impair another's ability to use it, basic research has all the characteristics of a public good which government should support.

Existing Provisions. Section 44F currently provides a tax credit equal to 25 percent of the excess of a taxpayer's "qualified research expenses" over the average amount of such expenses during a base period. Qualified research expenses are defined as expenditures incurred in research or experimental activities, as that term is used in Code section 174 (relating to the deduction of R&E expenses). Section 44F defines "base period research expenses" for a taxable year to mean the average of the taxpayer's qualified research expenses over the three preceding taxable years. The credit is currently scheduled to expire on December 31, 1985.

The legislative history of the R&E credit indicates that the existing administrative interpretation of the term "research or experimental" under section 174 was to apply for purposes of the credit. Section 174 allows taxpayers to expense research and experimental expenditures, unless the expenditure are properly chargeable to capital. The current regulations under Section 174 do not define the term "research or experimental" precisely. This imprecision is not critical outside of the credit area, because many expenditures are deductible currently either as R&E expenses or as ordinary and necessary business expenses under Section 162. This imprecision in the definition of the term "research or experimenatal" under Section 174, however, enables taxpayers to argue that the cost of developing virtually every product is a qualifying expense under the R&E credit.

Experience With the Credit. Although our experience in administering the credit has been limited, we believe that it provides a preliminary indication as to how the credit has been used. In addition, it suggests how we can improve the credit.

We have made an analysis of tax returns for 1981, which was the first year that the tax credit was in effect. The credit was available only for expenses paid or incurred after June 30, 1981. Our sample of tax returns indicates that 12,350 corporations reported $3.4 billion of qualified incremental R&E expenditures on their 1981 tax returns. These corporations claimed $858 million of R&E tax credit.

Of the total amount of credit claimed by companies for which we have data, half went to 53 companies, each of which reported more than $2.3 million of credit. These 53 companies may be divided into two broad groups. The first group consists of 26 companies whose main businesses are in the relatively "high-tech" fields of pharmaceuticals, computers, electronics, aerospace, scientific instruments and photographic equipment. These 26 "high-tech" companies account for $223 million of credit. The second group consists of 27 companies in utilities, the oil industry and in the more traditional heavy manufacturing fields such as chemicals, rubber, steel, motor vehicles, farm and construction equipment, industrial machinery and electrical equipment. These 27 "heavy industry" companies earned $206 million of credit. Virtually all of the companies in both categories are very large corporations and all have large R&E budgets.

The credit was not used exclusively by manufacturing and utility companies. Of the total number of companies in our sample that claimed R&E credits, over one-fourth have their principal line of business outside of manufacturing and utilities. These companies, mainly in the trade, service and financial sectors, claimed growth in qualified R&E from 1980 to 1981 of 91 percent. While these companies account for only about 8 percent of the total credits claimed, the large number of these companies and their extraordinarily high growth in R&E indicates that their share of the credit may increase in the future.

Among the taxpayers who claimed the R&E tax credit in 1981 were taxpayers in such lines of business as fast food restaurants, baked goods, home building, publishing, banking, stock brokerage and movie production. Although we do not have data indicating the particular activities for which these taxpayers claimed the credit, we suspect that these activities frequently did not involve "high technology" research.

S. 2165

Extension of credit. The R&E credit is currently scheduled to expire on December 31, 1985. S. 2165 would make the tax credit for research and experimentation expenses permanent.

The Administration remains strongly committed to the R&E credit. We understand that taxpayers must be able to plan their R&E activity with certainty that the credit will be available. Our experience with the credit, however, is limited and we must continue to study its effectiveness. For these reasons, we support extending the credit for three years through December 31, 1988.

Definition of Qualifying Expenses In an effort to narrow the scope of the present credit, S. 2165 adopts a new definition of "qualified research." In general, we believe these proposed changes represent an improvement over existing law. However, we have serious reservations about how the bill defines "new or significantly improved" business items qualifying for the credit. Unless this definition is clarified to confine the definition to costs which in fact relate to items which are new or significantly improved from a technological standpoint, we cannot support the provisions relating to the R&E credit in S. 2165.

Under S. 2165, "qualified research" means (i) a planned search or critical investigation (including basic research) undertaken to discover information which may be useful in the development of a new or significantly improved business item of the taxpayer or (ii) applying existing knowledge to develop a new or significantly improved business item of the taxpayer. The bill defines the term "business item" to include a product or process or significant component part or element of a product or process for sale, lease, license or use by the taxpayer in a trade or business.

Under the bill, a business item of the taxpayer is "new or significantly improved" if the item is developed by the process of experimentation and the predominant portion of the item's new characteristics are functional, rather than stylistic. The bill provides that computer software which a taxpayer develops for internal use, other than for use in research or production activities or for provision of certain computer-based services to customers, shall not be treated as a business item of the taxpayer, except to the extent provided by regulations. S. 2165 also explictly excludes several activities, primarily relating to activities undertaken after the initial development of an item, from the scope of the term "qualified research."

Discussion

Although S. 2165 represents an improvement over existing law, we have a number of serious concerns with the bill's approach. We think that the definitional provisions of the bill, though using certain terminology we endorse, could result in an extremely low threshold that will enable taxpayers to claim the credit for virtually all pre-production expenses as qualifying for the R&E credit. If this occurs, the credit will apply to an overly broad range of activities and will, thus, be ineffective in encouraging innovative research and experimentation.

The bill's critical provision is the definition of "new or significantly improved." We endorse this concept as a standard for determining whether expenses should be eligible for the credit. However, the definition in S. 2165 goes on to provide that a business item is "new or significantly improved" if its new characteristics are predominantly functional, rather than stylistic. In practice, this definition will exclude only purely stylistic changes; even trivial functional improvements will qualify.

A few examples will illustrate our concerns. Consider modifications in the design of an automobile. These changes clearly have a stylistic component; the design of an automobile body, however, is also functional because it affects the aerodynamic efficiency of the car. Thus, modifications in the design of a car body have a dual character. Whether in particular cases functional aspects of a product's new characteristics predominate over stylistic aspects is arguable. We would expect that, under the definition in S. 2165, taxpayers will claim the credit in nearly all cases where the new characteristics are functional to any extent.

Under the bill, a taxpayer could also claim the credit for developing a new product which involves no technological innovation. Consider a firm that sets out to produce a new coffeemaker which incorporates an automatic timer. Assume that the taxpayer has not previously marketed a similar product, but that the new coffeemaker and timer incorporate well-established technology and the taxpayer will have little difficulty in developing the item. Under the bill, the expenses of developing the new coffeemaker will qualify as research and experimentation expenses because its new characteristics are functional and, presumably, some trial-and-error (i.e., evaluation of alternatives) will be involved. This is true despite the fact that the item is in no sense technologically innovative.

Finally, consider a taxpayer that develops a product that merely incorporates well-established technology. If a company decides to develop a personal computer, the development expenses will qualify whether or not the taxpayer tried to develop a computer which would be a significant technological improvement compared to other personal computers on the market. In fact, the taxpayer's new model could represent merely an attempt to catch up with exisitng, widely available technology or to copy another manufacturer's popular model. Nevertheless, all of the development expenses would qualify for the credit under S. 2165.

These examples demonstrate that the "new or significantly improved" requirement of S. 2165 will exclude few costs related to developing or improving a product from qualifying for the R&E credit. S. 2165 simply requires that the taxpayer's activity result in some functional improvement to a product or process for the expenses to be creditable.

We are also concerned that the bill adopts the same standard for determining whether an in-house product or process is new or significantly improved as it does for items which the taxpayer offers for sale. This low standard may result in taxpayers claiming that many types of management expenses are creditable. For example, if a taxpayer changes a production line by repositioning machines to increase slightly the speed of production, the activity arguably could well qualify because it resulted in a functional improvement to a process of the taxpayer.

The low threshold which the functional improvement standard establishes also undermines several of the bill's specific exclusions. For example, the bill provides that expenses associated with the adaptation of a product for a particular customer will not qualify, unless the adaptation results in a new or significantly improved business item. Thus, any adaptation which is predominantly functional is likely to be eligible for the credit. While we believe that the bill's specific exceptions are sound in principle, granting the credit for every functional improvement generally negates their effect.

To provide the greatest incentive for increased levels of innovative R&E for the least revenue cost, we believe that the definition of research or experimental should be targeted to truly innovative activities. In this regard, we start with the proposition that all costs incurred in conducting basic research are creditable. The term "basic research" includes any original investigation for the advancement of scientific knowledge not having a specific commercial objective. Such term, though, does not include basic research in the social sciences or humanities or basic research conducted outside the United States.

In attempting to target the credit for development activities, we also begin with the requirement that research and experimentation activities must be oriented towards new or significantly improved products or processes. Moreover, we believe that the intended benefits of this credit as an incentive will be dissipated if projects designed to produce any functional improvement receive the credit. We suggest that the expenses associated with an activity should qualify for the credit only if, as of the time the taxpayer commences the activity, the taxpayer intends to achieve a significant technological improvement in a "business component."

In this context, we focus on the "business component" which is the most basic element or component part of a product or process with respect to which the R&E activities undertaken to produce the substantial technological improvement relate. If these R&E activities relate to an entire product or process, then the development costs for the entire product are creditable. On the other hand, if the R&E activities undertaken to produce a substantial technological improvement relate only to a component part and the taxpayer incurred more than an insignificant amount of non-R&E development costs with respect to other aspects of the product or process, only the R&E costs related to the component will be eligible for the credit. Focusing on the particular component which is substantially improved will prevent routine product development costs from qualifying for the R&E credit.

To illustrate the application of the "business component" concept, consider a computer manufacturer that introduces a new personal computer. Assume that to produce the computer the manufacturer combines existing, widely-available component parts, except that the manufacturer develops an entirely new type of screen which causes less eye strain and produces better graphics. The manufacturer incurs substantial R&E expenditures in developing the new screen and substantial engineering costs in combining the various parts, including the screen, into a marketable product.

To determine whether the costs of developing the entire computer or only the costs of developing the screen would be creditable, it should be determined whether substantially all of the costs at each level of product development relate to the substantial technological improvement. At the product level, substantially all of the development costs do not relate to technological improvements and, thus, not all of the development costs associated with the product as a whole would qualify. At the component level, the costs of developing the screen will satisfy the substantially all test and, therefore, all of the costs of developing the screen are eligible for the R&E credit. The costs of producing the other components of the computer would not qualify for the R&E credit since they primarily involved combining existing, widely-available component parts.

In determining whether a taxpayer intended to achieve a significant technological improvement in a business component, it generally will be necessary to examine all of the facts and circumstances. Despite the difficulty in precisely defining the proper scope of the R&E credit, it is possible to articulate certain factors which tend to indicate whether or not a taxpayer sought a significant technological improvement in a business component.

We believe that the presence of one particular factor should be conclusive evidence that a taxpayer intended to achieve a significant technological improvement in a business component. If a taxpayer faced substantial risk that the technological result could not be achieved, the costs incurred in the activity should in all events be creditable. The determination whether substantial risk exists should be made separately for each business component and with reference to all existing technology (excluding technology denied to the taxpayer under patent or trade secret restrictions), not simply the technology and products previously developed by the taxpayer.

Even where there is no clear showing that substantial technological risk was present, we believe other factors could indicate that the taxpayer sought a significant technological improvement. No one of these factors should be dispositive, but are only evidence in determining whether a taxpayer intended to achieve a significant technological improvement in a business component.

One favorable fact would be that the taxpayer sought to achieve a meaningful functional improvement in a business component over the existing state-of-the-art. This factor is intended to differentiate product development costs associated with routine or trivial improvements, or mere imitation of the products of other taxpayers, from costs incurred to obtain a meaningful functional improvement. Moreover, it should be made clear that such improvements could be sought over time in a series of steps. We recognize that improvements in the state of the art may take place in one major change or, over the course of a relatively short period, in a series of minor functional improvements which, when viewed as a whole, constitute a meaningful functional improvement. Much innovative R&E activity is by its nature a cumulative process which requires building on minor advances.

Another favorable fact would be that the taxpayer sought to achieve a significant reduction in the cost of producing a product. For example, a taxpayer may set out to develop a new technological process for manufacturing an existing product which will allow the taxpayer to sell the product at a fraction of its current cost.

A third favorable fact indicating that a taxpayer sought a significant technological improvement would be that the taxpayer's activity involved experimentation in the laboratory or scientific sense. We believe the existence of such experimentation, as opposed to routine engineering activities, indicates that the taxpayer intended to achieve a significant technological improvement in a business component. Another favorable fact would be that the taxpayer, in seeking a significant technological improvement in a business component, achieved a significant increase in the body of technological knowledge within the industry.

By contrast, other factors would indicate that a taxpayer did not seek to achieve a significant technological improvement. Evidence that a taxpayer did not intend a significant technological improvement exists when the taxpayer undertakes an activity to make routine, cosmetic or non-technological alteration of existing products, production lines, manufacturing processes or other ongoing operations indicate that the taxpayer did not intend to achieve a significant technological improvement. Similarly, if, when a taxpayer commences an activity, the taxpayer's primary uncertainty relates to the existence of or possible changes in market conditions, evidence exists that the taxpayer did not intend a significant technological improvement.

Similarly, if a taxpayer seeks to replicate an existing product using a process which is known or sets out to combine existing items whose capabilities are known, this would indicate that the taxpayer did not seek a significant technological improvment. Finally, if a taxpayer undertakes an activity to adapt an existing product to the specifications of a particular customer, evidence exists that the taxpayer did not seek a significant technological improvement.

The application of this "significant technological improvement" standard can be illustrated by the examples used previously to demonstrate the effect of the functional improvement standard in S. 2165. Changes made to the body of an automobile will qualify in some, but not all, cases under a significant technological improvement test. A minor change to a car's body may be predominantly a functional change, but it involves no substantial risk. Applying the other factors enumerated previously, it would be determined that it is unlikely the changes were intended to lead to a significant technological improvement. Instead, the stylistic aspects of the changes and the fact that any uncertainty primarily related to market conditions would tend to indicate that the taxpayer did not seek a significant technological improvement.

Similarly, the cost of developing of a new coffeemaker which incorporates existing technology would likely not be eligible for the credit. The development would not involve substantial risk and no fact in the example would tend to indicate affirmatively that a significant technological improvement was intended. In this case, the taxpayer set out to combine existing items whose capabilities were known and any risk that the taxpayer faced related to the market. These facts indicate that the taxpayer did not intend a significant technological improvement. Thus, the costs of developing the coffeemaker would not be eligible for the R&E credit.

The result is the same in the case of a manufacturer of personal computers that merely sets out to copy existing technology that is readily available. The development activities for the computer would not involve substantial risk. Moreover, nothing in the example tends to indicate an intent to produce a significant technological improvement. Instead, the taxpayer merely combined existing technology and faced only uncertainty relating to the market in developing the computer.

A further example can illustate circumstances under which a taxpayer is eligible for the R&E credit under the significant technological improvement test. Assume that a taxpayer set out to produce and successfully developed a water-resistant, lightweight, breathable fabric which is a better material for a variety of outdoor uses than any other material previously marketed. In this case, the fact no one had previously manufactured a comparable material indicates that the taxpayer had a substantial risk that the R&E activity undertaken to discover the fabric was subject to a substantial risk that the technological result sought could not be achieved. Moreover, assuming this first taxpayer kept its process for producing this revolutionary fabric secret and was able to charge a premium because of its unique properties, we would say that a second taxpayer that set out to achieve the same objective and thereby reduce its cost of obtaining the fabric would also be eligible for the credit. This is so because the second taxpayer effectively faced a sufficient risk that it could not achieve the technological result sought, since the process for producing the fabric was not known and had to be discovered anew. In addition, the facts and circumstances, including the cost reduction sought and the experimentation required to achieve the technological result sought, would indicate that the taxpayer sought to achieve a significant technological improvement.

The difference in treatment of development costs under this formulation and that proposed in S. 2165 is clear. In our view, the scope of qualifying expenses under S. 2165 is too broad to provide any meaningful incentive effect. We urge that the definition of R&E activities qualifying for the credit reflect the concept of significant technological improvement. This is necessary to target the credit to the innovative research and experimental activities that merit a government subsidy. In this manner, we can provide an effective incentive and encourage taxpayers to seek the technological innovation which is essential to our economy.

Administrative difficulties are inherent whenever we try to define activities eligible for special tax treatment. The functional improvement standard in S. 2165, while likely to be somewhat easier to administer than the standard we propose, fails to distinguish innovative R&E activities from routine development activities. Consequently, under S. 2165, the credit would provide no incentive to the activities we all wish to encourage. If the R&E credit fails to provide the intended incentive, we have merely succeeded in reducing tax revenues.

Start-up Companies. Current law provides that the R&E credit is available in connection with qualifying amounts paid or incurred in carrying on any trade or business of the taxpayer. Section 104(a) of S. 2165 provides that any corporation other than an S corporation, personal holding company or service organization, is deemed to be engaged in a trade or business for purposes of the credit. The purpose of this provision is to allow corporations to claim the credit for research and experimental activities undertaken to enter a new business.

The requirement of existing law that a taxpayer be engaged in a trade or business to be eligible for the credit is intended to serve two related purposes. First, it prevents tax shelters from receiving the benefit of the credit. Second, it serves to protect the incremental feature of the credit: if any taxpayer could receive the credit, existing businesses would have research performed by other entities, who would have no base period R&E, and the incremental character of the credit would be substantially nullified.

We are concerned, however, that, as drafted, the bill could have that effect. For this reason, the proposal in S. 2165 to deem corporate taxpayers as engaged in a trade or business for purposes of the R&E credit is not intended to undermine the purposes of the "in carrying on" test. We suggest that the bill be clarified somewhat to eliminate some potential cases of abuse. We would support a provision which clearly allows a corporate taxpayer to claim the R&E credit in connection with a trade or business it intends to conduct in an active manner; a corporation that intends to merely lease or license the results of the R&E activity should not, however, be deemed to satisfy the "in carrying on" test.

Joint Ventures. Section 104(b) of S. 2165 provides that, in the case of research being conducted by a partnership, whether the "in carrying on" test is satisfied will be determined at the partnership level and the R&E credit will be apportioned among the partners in accordance with Section 704. The bill creates two exceptions to this rule. First, in the case of joint ventures composed of regular corporations (i.e., corporations other than S corporations, personal holding companies or service organizations) the "in carrying on" test is deemed satisfied. Second, where not all members of the joint venture are regular corporations, but each member would separately satisfy the "in carrying on" test with respect to the partnership's research expenditures, the partnership's in-house and contract research expenses can flow through to the members.

The general rule of Section 104(b) of S. 2165 is merely a codification of existing law and, therefore, we do not oppose it. However, we oppose the exception to this rule for joint ventures composed of regular corporations because it could undermine the incremental nature of the credit. Under the special rule for corporate taxpayers adopted in Section 104(a) of S. 2165, passive corporate investors could receive the R&E tax credit for investments that are largely financing arrangements. This is inconsistent with the provisions of current law designed to limit the credit to taxpayers actively engaged in a trade or business, which are essential to preserving the incremental feature of the credit.

We do, however, support the second proposed exception to the general rule. Under the proposed regulations, the R&E expenses of a joint venture are treated as if incurred directly by the venturers. Joint ventures composed of entities all of which are engaged in the trade or business to which the joint venture's research relates should share in the R&E credit for that activity.

Depreciation added as a Qualified Research Expense. S. 2165 eliminates the special 3-year ACRS category for research equipment. Such equipment would, therefore, constitute 5-year recovery property for purposes of ACRS. The depreciation allowable with respect to such research equipment would be treated as a qualifying expense for purposes of the credit. The bill also would increase the percentage of contract research payments which are eligible for the credit from 65 percent to 75 percent to reflect the inclusion of research equipment depreciation as an eligible expense for credit purposes.

We oppose this change. Under current law, property used in connection with research and experimentation is treated as 3-year property for purposes of the ACRS deduction. In addition, it is eligible for a 6 percent investment tax credit (or a 4 percent investment tax credit if the taxpayer elects to avoid a basis reduction equal to 50 percent of the credit). As a result of changes made in TEFRA, the tax benefits accorded 5-year property frequently will be greater than 3-year property because 5-year property is eligible for an 8 percent investment tax credit without a basis reduction. Consequently, taxpayers will not be adversely affected by changing the ACRS class of R&E property from 3-year to 5-year.

In addition, we believe that allowing depreciation with respect to research equipment to qualify for the R&E credit along with ACRS and the investment tax credit provides overly generous treatment for such property. ACRS and the investment tax credit provide an adequate incentive for investment in plant and equipment. Also, we believe that the R&E credit generally should be based on actual expenditures. Moreover, allowing the credit for capital expenditures made with borrowed funds can generate excessive tax benefits.

Effect of Inflation on the R&E Credit

The R&E credit is based on increases in R&E expenditures in order to target the credit to taxpayers who are expanding their R&E efforts. A portion of the increases in expenditures will result from cost increases due to inflation rather than from an increase in the real level of R&E activity.

For example, consider a business that incurs $1,000 of qualified research expenses in year 1 and increases its costs in subsequent years only to keep pace with increased costs. If costs increase by 10 percent per year, the qualified research expenses would be $1,100 in year 2, $1,210 in year 3 and $1,331 in year 4. The business's R&E credit for year 4 would equal 25 percent of the excess of the qualified research expenses for that year ($1,331) over the average amount of qualified research expenses for years 1 through 3 ($1,103). Consequently, this business would receive an R&E tax credit of $57, even though it would have no real increase in R&E expenditures.

Therefore, we think it is appropriate to consider whether taxpayers' base period research expenses should be indexed to account for the effects of inflation. In this way, the credit would be provided only for real increases in R&E expenses. Based upon data from 1981 tax returns, we estimate that about 20 percent of the R&E credit claimed was attributable to increases in R&E expenditures due to inflation, rather than a real increase in R&E activity. This percentage is much higher in the case of manufacturing companies outside of the high-tech fields. The actual portion of the credit that reflects inflationary increases in expenses will depend on the length of the base period, which was only one year with respect to 1981, as well as the rate of inflation.

Conclusion

The Treasury Department continues to support the R&E credit. The R&E credit can provide an important incentive for taxpayers to undertake the innovative R&E activities which are critical to strengthening this country's economy.

To accomplish this objective, we believe that section 44F should be modified to make it a more effective and efficient incentive for the performance of R&E. The types of R&E

activities that receive the credit should be better targeted to taxpayers' innovative R&E activities. We look forward to working with the Committee to improve this important provision.

TITLE II

Promotion of University Research and Scientific Eduction

Expansion of Credit for University Basic Research

Under current law, 65 percent of amounts which a corporation contributes to universities and certain other qualifying organizations to conduct basic research are treated as contract research expenses and are eligible for the R&E credit.

Section 201 of S. 2165 creates a new credit equal to 25 percent of that portion of the payments to universities and other qualified non-profit, tax-exempt organizations for basic research which exceeds a fixed maintenance-of-effort floor based on contributions to universities for basic research during the years 1981 through 1983. The bill defines the maintenance-of-effort floor as the greater of: (i) the average amount paid by the corporate taxpayer for the performance of basic research by universities from 1981 through 1983 or (ii) 1 percent of the average of the sum of the taxpayer's in-house research expenses, contract research expenses and university basic research payments from 1981 through 1983.

The bill expands the category of organizations eligible to receive creditable contributions. The bill also disallows the R&E credit for corporate transfers to universities and other qualified organizations of property which are eligible for the enhanced charitable deduction for scientific equipment provided in the bill.

We understand that section 201 of S. 2165 is designed to eliminate disincentives in current law to funding multi-year basic research projects. We believe that this is a desirable goal and we would like to work with the Committee to fashion an effective solution. Under current law, a company that makes a multi-year funding commitment will receive a much smaller R&E credit if the funds are not paid in a single year, but are paid over several years. Therefore, we suggest a straight-forward change in the law which would provide that the total R&E credit with respect to a multi-year funding commitment should not be reduced below the amount of the credit that would have been available had the company made the contribution all in one year. Of course, the credit could not be claimed until the actual contribution was made.

We support the proposal to disallow the regular R&E credit for contributions of property to universities and other qualifying organizations. Allowing the R&E credit for such contributions is inappropriate, because the charitable contribution deduction may amount to as much as twice the cost to the taxpayer of producing the property. The tax benefits resulting from these contributions are sufficient without also allowing the R&E credit. Moreover, we question whether the contribution of appreciated property generally should be eligible for the R&E credit unless the transfer is treated as a taxable disposition of the property transferred.

Deduction For Contributions Of Scientific And Technical Property For Use In Scientific Education

Background

Under current law, a corporation generally may deduct the amount of cash or the fair market value of property contributed to a qualified charitable organization. The amount of the deduction is limited, however, if the corporation contributes property which, if it had been sold by the corporation, would not have resulted in long-term capital gain ("ordinary income property"). In the case of contributions of ordinary income property, such as inventory, the amount of the charitable contribution deduction is equal to the fair market value of the property less any gain that would have been recognized if the donor had sold the property at its fair market value. In general, therefore, the deduction may not exceed the donor's tax basis in the ordinary income property, which is generally the amount expended by the donor to manufacture or to acquire the property. Similarly, in the case of a contribution of property used in the donor's trade or business, the charitable contribution deduction is generally equal to the fair market value of the property, reduced by the amount of any depreciation that would have been recaptured as ordinary income if the donor had sold the property. In the case of a charitable contribution of services, the deduction is limited to the donor's out-of-pocket cost of performing the services.

Current law provides only two exceptions to the limitation applicable to gifts of ordinary income property. First, contributions by corporations of certain ordinary income property, to be used solely for the care of the ill, the needy, or infants, are entitled to an enhanced deduction. The second exception, which this bill would expand, applies to corporate contributions of scientific equipment and apparatus to certain institutions of higher education.

For ordinary income property that qualifies for these exceptions, the charitable contribution deduction is equal to the fair market value of the contributed property, reduced by only one-half of the amount of gain (other than long-term capital gain) that would have been realized if the property contributed had been sold by the donor at its fair market value. The amount of the deduction, however, cannot exceed twice the donor's basis in the property.

A corporation must satisfy several requirements to qualify for the enhanced deduction applicable to contributions of scientific equipment. First, the recipient must be a qualified institution of higher education, defined generally to include colleges, universities, junior colleges, and post-secondary vocational schools. Second, the property contributed must be tangible personal property, in the nature of inventory, that was constructed by the donor no more than two years prior to the date of the contribution. For this purpose, property is considered to have been constructed by the donor only if the cost of the parts used in constructing the property that are manufactured by the donor or a related party constitute at least 50 percent of the donor's total cost of the property. Third, the property must be scientific equipment or apparatus, substantially all the recipient's use of which is for research, experimentation, or research training, in the United States, in the physical or biological sciences. Fourth, the property may not be transferred by the recipient in exchange for money, other property, or services. Finally, the recipient must furnish the donor with a written statement that the use and disposition of the property will be in accordance with these conditions.

Description

Section 202 of S. 2165 would alter the special treatment available to corporations with respect to contributions of scientific equipment to institutions of higher education. The bill would expand the types of property that qualify for the enhanced deduction to include not only tangible ordinary income property, such as inventory, but also tangible personal property that is used in the donor's trade or business. In addition, the bill would provide an enhanced deduction for contributions of service contracts issued in connection with qualified contributions of scientific equipment.

While the bill would continue to make the enhanced deduction available for contributions of scientific equipment, it would also extend the types of eligible property to include technical equipment, computer software, and replacement parts for both scientific and technical equipment. Moreover, the uses to which the contributed property may be put by the recipient also would be expanded by the bill. The bill would permit property to be used for direct education of students or faculty, in addition to research, experimentation, and for research training. The bill also would expand the disciplines in which the equipment could be used to include computer science, physical, biological, computer, or engineering technology, and electronic and automated industrial, medical and agricultural equipment and instrument operation. The bill would continue the provision in existing law requiring the recipient to use the equipment in the United States.

The bill also would relax the existing requirement that the contributed property must be manufactured by the donor. Current law would be changed to provide that a donor would be considered to have manufactured ordinary income property if it assembled 50 percent of the property in the regular course of its business of assembling and selling or leasing the same type of property.

The bill is intended to promote gifts of high quality, "state-of-the-art" equipment and would thus provide several requirements to ensure that property contributed was not technologically obsolete or in poor condition. In the case of ordinary income property, the bill would require that the contribution be made within six months after assembly of the property was substantially completed. Contributions of tangible personal property used in the donor's trade or business would have to be made not more than three years after the property was first placed in service. In addition, contributed property, whether ordinary income property or tangible personal property used in the donor's trade or business, would have to be accompanied by the warranty or warranties normally provided by the manufacturer in connection with a sale of the property. Moreover, the bill would require that contributed property used in the donor's trade or business was functional and usable for the qualified uses, without the necessity of repair, reconditioning, or other investment by the recipient.

Finally, the bill would require donors to meet a series of additional conditions, some of which alter existing law. The bill would prohibit the recipient from transferring the property in exchange for money, other property, or services for five years following the date of the contribution, rather than prohibiting such transfers indefinitely, as does existing law. In addition, except in the case of computer software or replacement parts, the value of the property contributed would have to exceed $250. The bill also would disallow deductions with respect to ordinary income property contributed under its provisions if the donor's contributions of the property, determined on a product-by-product basis, exceeded 20 percent of the units sold by the donor during the year.

The amount of the deduction allowable under the bill for a qualifying contribution of ordinary income property, including computer software, would be generally the same as is available under current law. Contributions of property used in the donor's trade or business would be subject to special rules entitling the donor to a deduction equal to the lesser of (i) the fair market value of the property or (ii) 150 percent of the donor's original basis in the property, less the adjustments, such as depreciation, required by section 1016(a) of the Internal Revenue Code. In the case of fully depreciated property, the amount of the deduction would thus equal 50 percent of the donor's original cost of the property, provided that the fair market value of the property at the time of the contribution was greater than that amount. In the case of contributions of services, the amount of the deduction would be equal to the lesser of (i) the amount normally paid by customers of the donor for such services or (ii) 150 percent of the donor's direct cost of providing such services. The amount of the deduction for contributed services would be reduced further by any amount otherwise deductible as a business expense with respect to performance of the services.

Discussion

The Treasury Department generally supports the provisions of the bill related to contributions of qualified scientific equipment. We believe that the provisions generally make the enhanced deduction for contributions of scientific equipment work in the manner originally intended by Congress.

In particular, we support the proposed extension of the availability of the enhanced deduction to donations of computer software. This provision will have the beneficial effect of encouraging donors to provide recipients with fully operational systems, which frequently require a software component to make the equipment usable.

The bill also would alter the definition of eligible uses of scientific equipment to include direct education of students and faculty. We do not oppose this change in the permissible uses of equipment. Current law, which permits equipment to be used for research training, but not direct education, may cause administrative difficulty and may lead to uncertainty among donors and recipients with respect to the distinction between research training and direct education. In many situations, it may be difficult to determine whether a piece of equipment, such as a microscope, is being used in research training or direct education. Consequently, to eliminate potential administrative difficulty and uncertainty, we do not oppose changing the permissible uses of equipment to include direct education in the physical and biological sciences.

The bill goes further, however, and expands the enhanced deduction to include contributions of scientific and technical equipment for use in research, experimentation, direct education, and research training in computer science and physical, biological, computer and engineering technologies. The original intent of the enhanced deduction was to stimulate gifts of equipment for use in scientific research activity in the basic sciences. The expansion of the permissible areas to include disciplines outside the basic sciences, such as computer science, represents a significant increase in the scope of the enhanced deduction. If the enhanced deduction were expanded beyond its original, very specific purpose, there would be no logical restraint against providing this benefit to all gifts to educational institutions, or indeed to all charitable gifts of property. We believe that such an unlimited expansion would be inappropriate.

In this regard, we note that existing law does not provide the enhanced deduction for contributions of computers to be used to provide training in computer literacy. The bill would alter this aspect of existing law and allow gifts of computers to be used for purposes far removed from the basic research activities contemplated when the enhanced deduction was first enacted. The bill thus allocates significant resources to particular fields of education, outside the scope of existing law, at a time of general fiscal restraint. While we do not oppose clarification of existing law with respect to direct education in the basic sciences, we oppose the broad expansion to include use of the equipment in computer science and physical, biological, computer, or engineering technologies. We believe, therefore, that the enhanced deduction should remain limited to gifts of equipment that foster research in the basic disciplines included in existing law.

The bill also extends the availability of the enhanced deduction to scientific or technical equipment used for education in equipment and instrument operation, often referred to as vocational education. We recognize the value and necessity of high quality vocational education, and we believe the enhanced deduction should be available for gifts of equipment to qualified vocational schools when the schools intend to use the equipment for research or direct education in the physical and biological sciences. We believe, however, that the broad extension of the enhanced deduction to equipment used for education in equipment and instrument operation, like its extension to include computer science and various technologies, goes well beyond the unique values intended to be furthered by the enhanced deduction. There is usually no research and experimentation element or innovation in the operation of instruments or equipment. For example, the bill might apply to gifts of technical office equipment, such as word processors, or to farm implements, such as tractors. We believe that availability of the enhanced deduction in such broad areas is inappropriate and is inconsistent with the original intent of the enhanced deduction.

In addition, the donors of equipment to be used in vocational education may receive a substantial direct economic benefit as a result of their contributions. In certain instances, for example, the students being trained to operate the contributed property may be the future employees of the donor. In other cases, use of a particular brand of equipment in vocational education may increase demand for that brand of equipment when the students enter the labor force. In these circumstances, the donor may lack the charitable motive that should be present when the enhanced deduction is allowed. Consequently, the enhanced deduction should not be available under such circumstances. We must, therefore, strongly oppose expansion of the permissible uses of the contributed property to include education in equipment and instrument operation.

Under the bill, the amount of the deduction for contributions of property generally would be limited to an amount no greater than the property's fair market value. We strongly favor the use of fair market value as a limit on the amount of the deduction. Use of the fair market value limitation ensures that a donor will not be better off as a result of a charitable contribution of property than it would have been by selling the property. The fair market value of the property is the price that the donor would have received if the equipment had been sold by the donor, in the market in which the donor customarily sells, at the time of the contribution and in the quantity contributed. Consequently, if the donation were made at a time the donor could not reasonably have been expected to realize its usual selling price, the fair market value, and hence the limit on the allowable deduction, would be the amount the donor would have realized upon a sale.

We also strongly favor the safeguards included in the bill that are designed to ensure that only high quality, state-of-the-art equipment is eligible for the enhanced deduction. For example, the requirements that the property be contributed within six months of assembly and that the normal manufacturer's warranty be provided to the recipient both foster the bill's intent. Moreover, although we would suggest some technical modifications, we do not oppose the provision of the bill that would broaden the definition of property manufactured by the donor to include property that has been assembled by the donor. In this regard, current law inappropriately has prevented many corporations who subcontract some or all of the manufacture of their products from obtaining the benefits of the enhanced deduction.

The Treasury Department generally does not oppose the provisions of the bill that would permit a corporation to obtain an enhanced deduction for contributions of scientific equipment used in the donor's trade or business. The bill requires that such property must be contributed within three years after it was placed in service by its first user. Although we generally do not oppose this provision of the bill, we are concerned that a three-year delay between the date scientific property is first placed in service and the date of its contribution to an educational institution may be too long to ensure that the property is state-of-the-art equipment and not technologically obsolete. We believe, therefore, that a shorter period between the date property is first placed in service and the date of the contribution could better serve the bill's purpose. Moreover, a shorter period would decrease the number of difficult valuation issues that will arise in the case of contributions of used property.

We strongly favor the provisions related to contributions of used property that limit the enhanced deduction to property (i) that is functional and usable at the time of the contribution, without the necessity of any repair or reconditioning by the recipient, and (ii) that is accompanied by the same warranty or warranties normally provided by the manufacturer in connection with a sale of the property. Such safeguards will help ensure that used property qualifying for the enhanced deduction will truly benefit institutions of higher education.

While we generally support the provisions of the bill discussed above, we strongly oppose the provisions that would permit an enhanced deduction for contributions of certain service contracts. Under current law, there are no special provisions related to contributions of services. The amount of the deduction allowed with respect to a charitable contribution of services is limited to the donor's direct cost of performing the services.

The Treasury Department has always opposed and Congress has rejected requests by numerous groups for an enhanced deduction for contributions of various services. We believe that an enhanced deduction for contributions of service contracts in connection with donations of scientific equipment should not receive preferential treatment. We question, for example, whether gifts of repair services for scientific equipment should be favored over gifts of other services, such as gifts of doctor's services to hospitals. In addition, the Internal Revenue Service might have difficulty in administering a provision allowing a deduction for services in terms of both verification and valuation. It should also be noted that the provisions of the bill generally applicable to contributions of property provide that gifts of replacement parts for scientific equipment are eligible for the enhanced deduction. Although the value of that enhanced deduction may be lessened by paperwork requirements of the bill, we believe that it might provide a sufficient incentive to donors to repair property contributed to institutions of higher education without increasing the deduction allowed for gifts of service contracts. We would be pleased to work with the Committee to eliminate any undue paperwork requirements.

Finally, it is unclear whether the bill allows a deduction for the contribution of a service contract in the year the contract and associated scientific equipment are contributed to the recipient or the year in which services are actually performed. We would strongly object to any rule that would permit a current deduction for services to be provided, or costs to be incurred, in the future. Such a rule would overstate the true cost of the services.

Scholarships, Fellowship Grants and Student Loan Forgiveness

Background

Current law provides that amounts received as scholarships or fellowships are fully or partially excluded from gross income. The exclusion is restricted to educational grants made by relatively disinterested grantors who do not require any significant *quid pro quo* from the recipients. Payments to enable individuals to pursue studies or research are not considered to be scholarships or fellowship grants if the payments represent compensation for past, present or future employment services or if the studies or research are primarily for the benefit of the grantor. The purpose of these rules is to distinguish between payments made primarily to further the education of the recipient (excludable from gross income), and compensatory payments made primarily to reward or induce the recipient's performance of services for the benefit of the grantor.

S. 2165

Section 203 of S.2165 would provide special rules for taxation of scholarships, fellowships and student loan cancellations for post-graduate degree candidates in mathematics, computer science, engineering, and the physical or biological sciences. The Treasury Department generally supports this provision.

Under the bill, amounts received by a qualified individual as a scholarship, fellowship grant or as "qualified student loan forgiveness" are excluded from gross income. A "qualified student loan forgiveness" is the forgiveness of a student loan that was used to finance postgraduate study in engineering, or the enumerated scientific fields, if the forgiveness is conditioned upon the recipient's agreement to perform teaching services for any of a broad class of qualified educational institutions upon completion of his or her course of postgraduate study. Under the bill, amounts received as a scholarship, fellowship grant or as qualified student loan forgiveness are not excluded from gross income if they represent payment for teaching, research or other services. In addition, scholarships and fellowship grants conditioned on a requirement that the recipient perform future teaching services for any of a broad class of institutions of higher education would not be includable in gross income.

Discussion

The current scholarship rules do not literally govern student loan cancellations. Subject to certain exceptions, a taxpayer's gross income includes income from cancellation of indebtedness (Code section 61(a)(12)). Cancellations of student loans, at least when the cancellation is not in the nature of a gift, would fall within this general rule.

As a preliminary matter, we believe it is appropriate to determine the tax treatment of cancellations of student loans under rules similar to those applicable to scholarships, since the same result could be achieved by making a grant to the borrower in an amount equal to the loan that is to be forgiven. As with traditional scholarships, the question is whether the conditions on the cancellation of the loan are primarily for the benefit of the lender, in which case the cancellation or grant is more properly treated as taxable compensation than a scholarship or fellowship.

We support Section 203 of S. 2165 because it distinguishes between awards that produce direct benefits for the grantor and those that do not. We believe that no income should result from an award conditioned on future services for any of a broad class of employers chosen by the recipient, when there is no expectation that the recipient will become an employee of the grantor or of an institution affiliated with the grantor.

Moreover, we see no reason to limit the treatment prescribed in the bill solely to science and engineering students. Although the overall purpose of the bill is to encourage high technology, distinctions should not be drawn among different types of students when grants are essentially non-compensatory.

S. 1857
Modifications of Tax Treatment of Private Foundations

S. 1857 would eliminate differences in the tax treatment of donors to public charities and private operating foundations and donors to private nonoperating foundations, and would relax several restrictions that are imposed on private foundations. The Treasury Department generally opposes S. 1857. We would be happy, however, to work with the Subcommittees on several objectives of the bill that we believe can be accomplished through alternative amendments or through administrative changes.

Background

Private foundations fill an important role by providing for diversity and flexibility in philanthropy. A donor, through a private foundation, may set aside a portion of his accumulated wealth for charitable purposes while retaining the power in the future to direct funds to the charitable causes that he deems most worthy of support. Because the assets of private foundations are often not committed to specific operating programs, foundations are able to shift their financial support from one charitable area to another relatively easily. However, the same factors that give foundations a unique role in philanthropy -- the continuing control of the donor or his designees and the existence of uncommitted funds -- also create the potential for use of foundations for private benefit. While private foundations in general have been operated responsibly and for the public benefit, prior to 1969 serious abuses occurred among a number of foundations. To ensure that charitable funds were devoted to charitable purposes, the Tax Reform Act of 1969 imposed a number of restrictions on private foundations.

Private foundations are treated differently from public charities under the Internal Revenue Code in several respects. In particular, the limitations on deductibility of charitable contributions are stricter for gifts to private nonoperating foundations than for gifts to public charities. In addition, private foundations are subject to a number of restrictions that do not apply to public charities.

Charitable Contribution Limitations

Individuals and corporations, in computing taxable income, are allowed a deduction under section 170 for contributions to qualifying tax-exempt organizations. This deduction, referred to as the "charitable contribution deduction," is subject to certain percentage limitations. In the case of corporations, the charitable contribution deduction may not exceed 10 percent of the taxpayer's taxable income, computed before the charitable contribution deduction and with certain other modifications. In the case of individuals, the charitable contribution deduction for contributions to certain organizations (in general, public charities and private operating foundations) may not exceed 50 percent of the taxpayer's adjusted gross income. These organizations are often referred to as "50-percent charities." The charitable contribution deduction for all other contributions by an individual, including contributions to or for the use of a private foundation, may not exceed 20 percent of the taxpayer's adjusted gross income (or, if less, the excess of 50 percent of the taxpayer's adjusted gross income over the amount of charitable contributions to 50-percent charities). Organizations that are eligible to receive tax-deductible contributions but that do not qualify as 50-percent charities are often referred to as "20-percent charities." Contributions to 50-percent charities that exceed the 50-percent limitation may be carried over to the 5 taxable years following the year of contribution. No carryover is provided for contributions subject to the 20-percent limit.

In general, the fair market value of the property contributed is allowed as a charitable contribution deduction. However, special limitations apply to deductions for contributions of appreciated property. In the case of contributions of capital gain property (appreciated property, the gain on which would have been long-term capital gain if the property had been sold by the donor at its fair market value) to a private foundation (other than a private foundation that qualifies as a 50-percent charity), the amount of the deduction is reduced by the portion of the long-term capital gain that would have been taxed if the property had been sold by the donor for its fair market value. A similar reduction applies to gifts to public charities only in the case of contributions of tangible personal property where the use by the donee is unrelated to the donee's exempt purpose or function.

Special Restrictions

Private foundations are subject to a number of special rules that do not apply to public charities. The private foundation rules were enacted in response to the use of some private foundations for noncharitable purposes. These rules prohibit self-dealing between a foundation and certain related persons (disqualified persons), require foundations to distribute for charitable purposes (other than distributions to a private nonoperating foundation) a specified minimum amount each year, prohibit foundations from owning substantial interests in any business enterprise, prohibit investments that jeopardize a foundation's charitable purposes, and prohibit expenditures for legislative or political purposes, for grants to an individual for travel or study unless the grant satisfies certain conditions, for a grant to an organization other than a public charity unless the foundation takes certain precautionary measures (known as "expenditure responsibility") to ensure the proper use of the funds, or for any noncharitable purpose.

Violation of the private foundation rules results in the imposition of excise taxes. A first-tier tax, equal to 5 to 15 percent of the amount involved in the violation, is imposed when the violation occurs. A second-tier tax, generally equal to 100 or 200 percent of the amount involved in the violation, is imposed if the violation is not corrected before the first-tier tax is assessed or a notice of deficiency is mailed with respect to the first-tier tax. The second-tier tax is abated if correction of the violation occurs within a specified time period. The first-tier tax cannot be abated.

S. 1857

S. 1857 would eliminate the present distinctions in the deductibility of contributions to 50-percent charities and the deductibility of all other contributions by increasing the present 20-percent limitation to 50 percent, eliminating the reduction of the deductible amount for contributions of capital gain property to private nonoperating foundations, and allowing a 5-year carryover for all excess contributions. These amendments would apply with respect to taxable years beginning after December 31, 1982.

S. 1857 also would make a number of changes in the private foundation rules. The bill would modify the definition of family member, for purposes of determining disqualified person status, to include only a person's spouse, ancestors, children, grandchildren, and the spouses of children and grandchildren. Currently, all lineal descendents and their spouses are included in the definition of members of a family. This amendment would be effective as of January 1, 1983.

S. 1857 would permit a private foundation to rely, in making a grant, on an IRS determination that an organization qualifies as a public charity or an operating foundation unless a notice has been published that the organization no longer so qualifies or the foundation has actual knowledge that the organization has been notified of a change in its tax status, provided that the foundation was not responsible for (other than by making a grant or grants) or aware of such a change in the organization's status. The bill also would exempt a foundation from the requirement that it exercise expenditure responsibility with respect to grants to a particular donee if the aggregate amount of grants made during the foundation's taxable year to the donee does not exceed $25,000. These amendments would be effective for grants made after December 31, 1982.

Finally, S. 1857 would provide for abatement (or refund) of first-tier taxes if the Secretary determines that a violation of the private foundation rules was due to reasonable cause and not to intentional disregard of rules and regulations, and the violation is corrected within the correction period provided for abatement of second-tier taxes. This amendment would be effective for taxable years beginning after December 31, 1982.

Discussion

Limitations on Deductibility of Contributions

Congress first distinguished between contributions to public charities and contributions to private foundations when it enacted the Internal Revenue Code of 1954, which increased the limitation on contributions to churches, schools, or hospitals from 20 percent to 30 percent. The stated purpose of this change was to aid the specified institutions in obtaining the additional funds they needed, in view of their rising costs and the relatively low rate of return they were receiving on endowment funds. In 1956, medical research organizations operated in conjunction with hospitals were added to the list of preferred charities. In 1962, publicly supported fund-raising organizations for schools were added to the list of 30-percent charities.

In 1964, the benefit of the 30-percent limit was extended to publicly or governmentally supported organizations and governmental units. By way of explanation, the Committee Reports stated that the extra 10-percent deduction was intended to encourage "immediately spendable receipts of contributions for charitable organizations." The Senate Finance Committee Report specifically noted that the additional 10-percent deduction was not allowed for contributions to private foundations, stating that such organizations "frequently do not make contributions to operating philanthropic organizations for extended periods of time and in the meanwhile use the funds for investments."

The last addition to the list of preferred charities was made by the Tax Reform Act of 1969. At that time, the limitation on contributions to such organizations was increased to 50 percent and the list of preferred organizations was expanded to include operating foundations, foundations that distribute all contributions to public charities or operating foundations within 2-1/2 months following the close of the year of receipt, certain pooled fund private foundations that are required to distribute all income currently and all corpus within one year after the donor's death, and all other charities that are not private foundations.

As demonstrated by this pattern of legislation, there exists a longstanding policy that contributions to essential service organizations (schools, hospitals, churches, and related organizations) and to charitable organizations that can be expected to spend contributions promptly in the direct conduct of charitable activities are to be encouraged by preferential tax treatment. Nevertheless, the foundation community has contended that the more restrictive limitations on the deductibility, for income tax purposes, of contributions to private foundations have been a major factor inhibiting growth of private foundations. In response to this contention, S. 1857 would provide identical treatment for lifetime contributions to foundations and lifetime contributions to public charities.

Notwithstanding the contentions of the private foundation community, we cannot support a change in the basic policy of preferential treatment for lifetime contributions to public charities unless there is substantial evidence that this policy has a serious adverse effect on private philanthropy. We simply have not seen any comprehensive and reliable data to support the claim that the limitations on deductibility of lifetime gifts to private foundations are seriously reducing contributions to foundations. We have found the available data on the birth and death rates of foundations and on charitable giving, both to foundations and to all charities, to be inadequate to determine whether there have been such declines. The rather limited information readily available on this matter indicates that giving to foundations increased as a percentage of total charitable giving from 1974 to 1979. This data, however, is defective in some respects as an indicator of the impact of the 1969 rules on private foundations. In any event, it would be difficult to determine from any data whether decreases in charitable giving resulted from the 1969 rules or from some other factor.

Moreover, we note that the current rules do not absolutely favor public charities over private foundations. The rules merely ensure that if a taxpayer is permitted to deduct from his income charitable contributions in excess of 20 percent of his adjusted gross income, a share of those contributions will go to organizations providing essential services or at least providing immediate rather than delayed benefits.

Nevertheless, H.R. 4170 would increase the 20 percent limitation which applies under present law to 30 percent in the case of contributions of cash and ordinary-income property. This modification to current law would provide an increased incentive for gifts to private foundations without eliminating the preference for gifts to public charities, operating foundations, and foundations that are required to distribute all contributions within a specified time period. We would support such a provision.

S. 1857 also would allow donors to deduct the full fair market value of appreciated property contributed to a private foundation. The income tax charitable contribution deduction is generally intended to permit a donor to make a charitable contribution with pretax dollars. When a donor contributes appreciated property, he is not required to include the gain on the property in income. Therefore, to the extent the value of the gift represents appreciation that would have been taxed in the hands of the donor, the gift is already being made with pretax dollars. If the donor is also allowed to deduct the full value of the property as a charitable contribution, he receives substantially increased tax benefits, since deduction of the amount of the appreciation reduces his taxable income from other sources. In addition, the full deductibility of unrealized appreciation provides increased potential for abuse through overvaluation of assets.

Congress previously has decided to provide the greater tax benefit of deductions for unrealized appreciation only with respect to contributions to public charities, and to operating foundations and foundations that are immediately required to make distributions for qualifying purposes. This Congressional decision is completely consistent with the policy of providing greater incentives for gifts that provide immediate rather than delayed benefits to charitable causes. Again, we believe that the distinction between contributions to public charities and contributions to private foundations is valid and should be maintained.

We note, however, that H.R. 4170 provides that contributions to private foundations of certain qualified appreciated stock are deductible at full fair market value. The bill defines qualified appreciated stock as stock (1) for which market quotations are readily available on an established securities exchange and (2) which would result in long-term capital gain upon sale. The increased deduction under the bill applies only to the extent that the cumulative total donations by a donor (and certain family members of the donor) to all private nonoperating foundations of stock in a particular corporation is less than 10 percent of the value of all outstanding stock of that corporation. This exception does not appear to create any potential for abuse. Accordingly, we would support an exception such as that contained in H.R. 4170.

With respect to the 5-year carryover provision, we see no benefit to charity from requiring a donor to a private foundation to postpone making a portion of a contribution until later years rather than making one large gift and carrying the excess contribution deduction over to later years. Therefore, we would support extension of the 5-year carryover rule to contributions to private foundations.

Definition of a Disqualified Person

Criticism of the definition of a disqualified person has centered on its inclusion of all lineal descendants of a disqualified person. After several generations, it becomes a substantial administrative burden for some foundations to keep track of all lineal descendants of all substantial contributors. The Treasury Department agrees that the administrative burden of keeping track in perpetuity of all lineal descendants of a substantial contributor cannot be justified by the benefits to be obtained from application of the private foundation rules to distant relatives. However, we believe that the inclusion of only children and grandchildren in the definition of family members would be too limited.

As an alternative, we suggest that the definition of family members include lineal descendants (and their spouses) through great grandchildren. H.R. 4170 defines family members in this manner.

Reliance on IRS Determinations

Private foundations must exercise expenditure responsibility with respect to grants made to another private foundation. In addition, distributions to a nonoperating private foundation may not be used to satisfy the foundation's minimum distribution requirements unless the amount of the contribution is distributed by the donee foundation for charitable purposes within one year after the year of receipt. Therefore, in order to avoid violations of the expenditure responsibility rules and the minimum distribution rules, a private foundation must determine whether a potential donee is a private foundation or public charity.

In many cases the public charity status of a donee is determined by the percentage of its support that is received from the general public. The Internal Revenue Service issues determination letters to all charities relating to their status as public charities. For new organizations, advance rulings are issued based on a determination that the charity can reasonably be expected to meet the public support test during a period of either 2 or 5 years. In general, a donor is permitted to rely on an IRS determination of a donee's public charity status until publication of notice of a change of status. However, reliance is not permitted where the donor has knowledge that the IRS has given the donee notice that its status would be changed or where the donor is responsible for or aware of a substantial and material change in the donee's support which causes the donee to lose its public charity status.

We believe that it is appropriate to require a foundation to inquire whether its grant would cause the donee to lose its public charity status. Therefore, we would oppose permitting reliance on IRS determinations of public charity status without any inquiry about the potential effect of a grant on the donee's status. We agree that the donor foundation should not be required to become an auditor of the donee's financial records. The current requirements, which permit a foundation to rely on financial statements provided by donees, do not require such audit activity. However, we would be happy to consider whether further efforts could be made to minimize the administrative burden associated with inquiries about a donee's public charity status. In particular, we believe an extension of the advance ruling period for new organizations to five years may be warranted. In addition, we would be happy to consider amending Treasury regulations to permit greater reliance on Internal Revenue Service classifications concerning new organizations in the first five years of their existence.

Expenditure Responsibility

A private foundation that makes a grant to an organization other than a public charity must exercise expenditure responsibility with respect to the grant to avoid the penalty tax imposed on taxable expenditures. Expenditure responsibility is defined in the statute to mean that "the private foundation is responsible to exert all reasonable efforts and to establish adequate procedures -- (1) to see that the grant is spent solely for the purpose for which made, (2) to obtain full and complete reports from the grantee on how the funds are spent, and (3) to make full and detailed reports with respect to such expenditures to the Secretary."

The bill would exempt private foundations from exercising expenditure responsibility where grants to a single donee during a taxable year do not exceed, in the aggregate, $25,000. It has been argued that expenditure responsibility is not needed for small grants because there is a basic requirement for exemption that a charitable organization making grants to noncharitable organizations must make every reasonable effort, including requiring periodic reports from grantees, to ensure that grant funds are spent for designated charitable purposes. We note that this requirement was in effect prior to 1969 and was not sufficient to prevent the abuses that caused Congress to enact the expenditure responsibility rules. In part, the effectiveness of a general rule for tax exemption is limited because its enforcement requires more extensive audit activity than the resources of the Internal Revenue Service permit. In addition, the penalty for violation of such a general rule is loss of exemption. The severity of this penalty makes both the courts and the Internal Revenue Service reluctant to invoke it. The excise tax on failures to exercise expenditure responsibility is a more realistic penalty.

The Treasury Department does not believe that the expenditure responsibility rules, in general, impose an undue administrative burden on foundations. The statutory requirements are simply that a foundation which makes a grant to a noncharitable organization or to a private foundation take reasonable steps to determine that the charitable funds will be spent for charitable purposes, obtain reports from the grantee on how the grant is spent, and report to the Secretary on the grant. Any responsible foundation would consider the first two steps essential if it were to turn over charitable funds to a noncharitable grantee. The requirement of a report to the Secretary is a necessary enforcement mechanism.

We believe that consideration should be given to whether failure to satisfy the requirement of a report to the Secretary should result in a taxable expenditure or in a lesser penalty for failure to comply with the reporting requirement. Aside from this, our review of the statutory provisions and the implementing regulations has not revealed any requirements that are more burdensome than is necessary to ensure that foundation grants are properly used. We understand that foundations which have exercised expenditure responsibility have found the requirements to be relatively easy to satisfy. Therefore, we believe that problems in this area are more a matter of mistaken understanding than actual defects in the statute.

In view of the concern expressed about this issue, we have requested representatives of the foundation community to provide us with information on any specific problems encountered in complying with the expenditure responsibility rules. We are prepared to work with the foundation community and the Subcommittees to resolve, either administratively or through legislation, specific problems that are identified. Such an approach would be preferable to any blanket exemption from expenditure responsibility.

First-Tier Penalty Tax

S. 1857 would provide for abatement of first-tier penalty taxes where a violation of the private foundation rules is due to reasonable cause and not intentional disregard of rules and regulations, and the violation is corrected. The private foundation rules were designed to provide clear standards for determining when a violation occurs and to impose automatically a penalty on any violation. The knowledge that the penalty for a violation must be paid in all events was intended to encourage foundation managers to familiarize themselves with the rules and to exercise care to avoid violations. A rule permitting abatement of the first-tier tax for reasonable cause could undermine the rules by suggesting that foundations which have exercised less care in conducting their activities may avoid the first-tier taxes.

The rules for imposing the first-tier penalty taxes already take into account the possibility that a foundation acting in good faith and with due diligence may have been involved in a violation. For example, under the self-dealing rules, no tax is imposed on the foundation in any event, and a tax is imposed on a foundation manager only in the case of participation in an act which he knew to be self-dealing. Thus, only the disqualified person who deals with a foundation, not the foundation or the foundation manager, faces any risk of imposition of a penalty tax for an inadvertent act of self-dealing. Under the minimum distribution provisions, the tax for a failure to distribute is imposed on the private foundation. However, an exception is provided for violations due to an incorrect valuation of assets that was not willful and was due to reasonable cause.

We do not see the need for a general provision allowing abatement of first-tier taxes. However, if there are specific situations in which knowledgeable and careful foundation managers might reasonably be expected to encounter difficulties in complying with the rules, we would be pleased to consider additional specific exceptions to imposition of the first-tier penalties.

* * *

For the foregoing reasons, the Treasury Department generally opposes S. 1857. However, we believe a number of the goals of S. 1857 can be accomplished through alternative amendments or through administrative changes. We would be pleased to work with the Subcommittees further on these matters.

Senator DURENBERGER. Senator Wallop.

Senator WALLOP. Thank you, Mr. Chairman.

Buck, you are concerned as I am with the need to maintain, if we were to do such a thing, vintage accounts for purposes of the investment tax credit under our proposal.

Assuming that your opposition didn't prevail, could you think of any way that that particular problem can be dealt with in a relatively simple manner?

Mr. CHAPOTON. You are talking about maintaining a vintage account for recapture purposes of ITC? I think it is not an overwhelming problem. It simply means that part of the simplicity you seek in going to an open-ended account is not achieved. So one thing you can simply say is "We won't achieve it." Beyond that, you might use, say in larger companies, some statistical approach on recapture of ITC, or you might simply forego it and reduce the ITC going in, for example.

I think the answer to your question is Yes, there are ways to deal with it.

Senator WALLOP. During TEFRA, as I recall it the final administration position with respect to the basis adjustment was to oppose it. The question here would be: Does this legislation become any more attractive to the administration because it repeals the basis adjustment?

Mr. CHAPOTON. Yes. That provides simplicity, and that is a factor of the present system that certainly is of concern to us.

Senator WALLOP. Thank you.

Thank you, Mr. Chairman.

Senator DURENBERGER. Buck, let me ask you a couple of questions on 1857. I think Jack Danforth will be back here and will want to go over the first part of your testimony. And I think it will probably relate to some of the administrative or expenditure responsibility rules.

Right now under current law, private foundations are required to keep rather detailed expenditure records for grants made to organizations that are not public charities. Are you familiar with why and how effective that whole process is?

Mr. CHAPOTON. Well, I am familiar with the concern that is expressed in maintaining expenditure responsibility. It requires, in the case of a donor foundation, a pre-grant inquiry, it requires an agreement with the donee, it requires maintenance of a report by the donee that the grant was in fact used for the purpose for which it was supposed to be used, and it requires reporting to the Internal Revenue Service.

All of that does add complication, and I know that it has been a concern to the foundation community for a number of years, and the concern has centered around the smaller foundations. They have suggested that you simply say for gifts under $25,000 no expenditure responsibility has to be exercised. We cannot go along with that.

We had asked for and frankly have not received specific suggestions on simplifying expenditure responsibility for smaller grants. I think it is more intimidating by foundations that have not developed procedures for using it than there is actual difficulty in practice. I think we have to maintain some expenditure responsibility procedures. That was one of the problems prior to 1969, and I just don't see how we can dismiss that altogether.

We are perfectly willing to try to simplify procedures in any way we can.

Senator DURENBERGER. I can appreciate the simplicity argument, too, but let me ask a different kind of question: What are we doing with the information? What over the 15 years has Treasury done with this data?

Mr. CHAPOTON. Well, there is a very complete audit procedure of private foundations, and that is a factor that is looked at in audit.

But just as important, Mr. Chairman, the mere fact that the foundation is required to go through the exercise means means that it will in fact inquire whether the grant is used as intended. It is a constraint that we think works.

Senator DURENBERGER. Let me ask you a similar question regarding the 2-percent excise tax, which I understand is designed to compensate in part for some of this paperwork we have been talking about.

Do you have information about the adequacy of the 2 percent? It sounds, from your previous response, that a lot of the work is done by the foundations.

Mr. CHAPOTON. Yes.

Senator DURENBERGER. And that is the good that you described. What does the 2 percent amount to, and what is it being used for?

Mr. CHAPOTON. I don't have readily in mind what the amount of the full 2 percent yields. It is in excess of the cost of administering the private foundation provisions. We have suggested from time to time that once an activity is established to be charitable, there is no reason for a tax on its income.

The original purpose was to reimburse the IRS for the administrative costs. It was originally 4 percent, but that was found to be excessive. It is now 2 percent, but that is in excess of the cost to the IRS, though.

Senator DURENBERGER. The 2 percent is in excess of the costs?

Mr. CHAPOTON. The revenue received by the 2 percent is in excess of the costs of administering the private foundation provision of the Internal Revenue Code.

Senator DURENBERGER. By how much?

Mr. CHAPOTON. I would have to supply that; I'm not sure how precise we can be, but we know that it is in excess.

Senator DURENBERGER. This is my last question: Are you aware of the provision in the House bill that would impose a limitation on the administrative grant expenditures in excess of 15 percent? It was my understanding that that was not a Treasury suggestion.

Mr. CHAPOTON. No, that was not a Treasury proposal; it was adopted in the House. I think there were some specific instances where very high costs in relation to the size of the grants were involved.

We are not satisfied with it. If that is a problem, it ought to be dealt with. We are not satisfied that the 15-percent approach is the proper way to deal with it though.

Senator DURENBERGER. You wouldn't object if we took it out over here?

Mr. **Chapoton**. We wouldn't object if you took it out. I guess we would like to look at it a little bit more and see if there is a problem that should be dealt with.

Senator **Durenberger**. Thank you.

Senator Danforth.

Senator **Danforth**. Buck, when we first passed the R&D tax credit in, I guess, 1981, there was a question at that time about how to define "research and development," and we decided to define it on the basis of just a reference to another section of the code. And it was thought that, while definitions of such things as "research and development" were always a little mushy, the greatest certainty would be provided if we could just reference something that was already established.

Nobody wants the provisions of the code to be used to rip off the Treasury, though very few deductions, I suppose, or credits, aren't used in an abusive way. Certainly the deductions for "ordinary and necessary" business expenses can be used for events that you and I would not consider "ordinary and necessary," but they deduct them anyhow.

If the definition is modified, I guess the question is, is it worth it? That is to say, will these changes produce sufficient additional revenues, to justify the uncertainty caused by the new definition?

Another way of putting the question, I guess, is: Can the redefining be done in a way which reasonably accomplishes most of your objectives and yet is sufficiently predictable to the business and the academic community so that they know what to plan, rather than to just think, "Well, this may or may not work out. But if we are audited, maybe we will be surprised," and, "We really can't plan whatever these investments are going to be?"

Mr. **Chapoton**. Well, the latter approach, of course, would be the most desirable. I recognize the need—we recognize and have spent a lot of time on this—and the desirability of predictability in this area.

I think your first question—and let me back up for just a minute, Senator Danforth—is a very valid one: Do we do enough good by changing the definition, if that change is inherently uncertain? I think that's a good question that can be explored.

Our conclusion on that is, yes, that without a change we are simply giving a credit beyond—or at least the credit will be claimed, and in an audit activity we cannot stop it—well beyond what the Congress intended.

And then your bill, and the intent of the groups that we have been working with and that you have been working with do attempt to address that problem. I think they attempt to provide certainty and attempt to restrict the definition somewhat.

We think, though, in practice it hasn't worked, and we haven't restricted it enough. It would basically allow the credit for all preproduction engineering, so we think it has got to be targeted more.

But I recognize, when we say that, we are adding some uncertainty, whether a particular activity or a particular expenditure will qualify for the credit. And I think it is a judgment call whether that is worth it or not. Our judgment right now is that it is, that in a great preponderance of cases the taxpayers will know that a credit qualifies or know that it will not. There will always be cases on the line, and we will simply have to have some development of the law.

That is not an unusual case, that we have to develop the law with respect to the tax deductions and credits in a lot of areas, but there is an awful lot of tension in a definition such as this when you are talking about a credit.

Senator DANFORTH. The markup is scheduled for Tuesday, and I know that you have been meeting with a variety of staff people and others to try to work something out. It's Friday now. My hope is that between now and Tuesday we can come to some kind of reasonable agreement; if not, we will just have to vote on the proposition and see what happens.

Mr. CHAPOTON. Let me say, we would like that, too, but we would surely like it in this bill.

Senator DANFORTH. Well, I hope you can continue working between now and Tuesday so that we can consider it in the markup. But I do hope that we don't throw out the baby with the bath; I hope we don't so try to hedge it so as to get away from some possible abuses that we create something that is just totally unpredictable and nobody can work with.

Mr. CHAPOTON. Well, I tend to agree with that. I think, though, that I'm not sure "abuses" is a proper term. I think what we are trying to see is that it is indeed targeted, and you would have some cases where the credit would be allowed for a manufacturing improvement that—I wouldn't call it an abuse, but I also wouldn't call it technological improvement that we are attempting to encourage.

Senator Durenberger, let me give you some figures on this 2-percent tax, if you would like.

Senator DURENBERGER. All right.

Mr. CHAPOTON. Our estimate—in 1982, $90 million was received from the tax. Our estimate, in examining all of the exempt organizations, the cost is about $33 million. The balance, $51 million on the pension plans from tax-exempt pension and profitsharing plans. So the main component, 33, is I think what you were looking for.

Senator DURENBERGER. Let me ask you one question before we leave S. 2165. I am trying to get clarified in my mind your testimony, your written testimony, on service contracts.

I understand that you favor including replacement parts, but not the labor to replace them. You don't have that problem on installation of equipment; you do favor including labor for that.

Mr. CHAPOTON. I think, in general, capitalized cost of equipment is——

Senator DURENBERGER. But why draw the distinction between original installation and replacement, between labor and parts?

Mr. CHAPOTON. Between labor and parts, on replacement?

Senator DURENBERGER. Yes.

Mr. CHAPOTON. I think we just cannot start down the road of saying services qualify

Senator DURENBERGER. I think the services play a part.

Mr. CHAPOTON. I understand, but services—many times, but not always—would be the major element of the picture there, and we would be starting down a road that I think you soon could not stop at that level. I mean, you are talking about just pure services.

Senator DURENBERGER. But I'm not sure what your doctor example had to do with it.

Mr. CHAPOTON. Well, just that if you provide services, then the services in the replacement parts would have to be a substantial portion but not the greater portion of the cost of the job. So you are talking about, really, a full deduction for the fair market value of services.

Senator DURENBERGER. Well, maybe we could iron that out by Tuesday.

Senator Bentsen, do you have any questions of the Secretary?

Senator BENTSEN. Mr. Chairman, I appreciate your scheduling this hearing and including S. 1758, the Accounting Cost Recovery Simplification Act.

I understand the Secretary has stated, you know, we just went through ACRS and issued regulations on that. I am sympathetic to that point of view, and I wish we had been able to get this one in the first instance. I think it would have been a very major step forward. It has substantial support in the Congress in those who have taken the time to study it.

I am not sure when we are going to attain this one, but I think we ultimately will. It has worked rather well in Canada, I think, from what we have seen there.

One of the things that we should be striving for is as much simplification as we can in the tax structure. I believe this would be a substantial step forward.

I would urge that the Department do what it can to see if we can work toward this without being disruptive in the process. I think it is a very worthwhile objective.

Mr. CHAPOTON. Senator Bentsen, I would certainly agree that there are some worthwhile features, simplifying features in going to an open-account system. We did look at it some in 1981. The other had a great deal of movement, as we all remember.

Senator BENTSEN. I think there was a great deal of pride of authorship on that one at that moment, and I agree with you, it had a great deal of movement. Personally, I think you are a little bit in the category of some of those people saying, "Well, we didn't think of this," and going ahead with it.

One of the problems we run into around here is everybody wanting to be an author. And just as the Carter administration had some good ideas, and some bad ones, there is a tendency to reject all that the other side has done. I hope after this year that we retain some of you fellows' good ideas. [Laughter.]

Mr. CHAPOTON. I hope so, too.

Senator BENTSEN. Thank you. [Laughter.]

Senator DURENBERGER. Any other questions?

[No response.]

Senator DURENBERGER. Thank you, Buck, very much.

Mr. CHAPOTON. Thank you, Mr. Chairman.

Senator DURENBERGER. Next we have a panel of two on S. 1758, Stan Bregman, on behalf of the Truck Renting & Leasing Association and the American Car Rental Association; and John J. Motley

III, director of Federal legislation for the National Federation of Independent Business.

Mr. WALLOP. Mr. Chairman, while they are coming up, I have a brief statement which I would like to put in the record.

Senator DURENBERGER. Without objection, that statement will be made part of the record.

I will remind the witnesses that we will be operating now with the 3-minute rule on each statement. Your written statements will be made part of the record, and you may proceed to abbreviate them.

We will start with Mr. Bregman.

STATEMENT OF STANLEY I. BREGMAN, BREGMAN, ABELL & KAY, WASHINGTON, DC, ON BEHALF OF THE TRUCK RENTING & LEASING ASSOCIATION AND THE AMERICAN CAR RENTAL ASSOCIATION, WASHINGTON, DC

Mr. BREGMAN. Thank you, Mr. Chairman.

My name is Stanley Bregman, a member of the firm of Bregman, Abell, & Kay, and I am representing the Truck Renting & Leasing Association and the American Car Rental Association.

I would like just to briefly summarize the written statement that I have submitted for the record.

I would like to first commend Senator Bentsen and Senator Wallop for taking the lead in introducing S. 1758. We believe this to be a very good piece of legislation and good tax policy.

The Truck Renting & Leasing Association and the American Car Rental Association are made up of a few large corporations and thousands of very small businesses. And it is primarily because of these small businesses that we urge the passage of S. 1758.

An open-account system is certainly a more simple system of accounting. It will reduce the number of accounts, and allow small companies to manage their assets and their gains and losses in a much more simple fashion. It gives them the flexibility not to take the maximum recovery percentage allowed in any one year. This is very helpful to small businesses, for they can then enjoy the benefit in future years.

If the open-account system was enacted by itself, it might be somewhat expensive to some of our members; but this bill was very wisely constructed to couple it with the repeal of the basis adjustment. The basis adjustment is a very costly, burdensome, complex procedure that not only gives trouble to small business with undue complications but it affects the bottom line of profits and losses, and that in turn affects the financial capabilities of the companies. The basis adjustment affects the financial statement, and it is the financial statement that determines bank financing.

There is one more point that I would like to make as far as this bill is concerned, which I think is a very good point, and that is that it allows people with 3-year property to drop that 3-year property into the 5-year class.

When ERTA was first enacted, a last minute amendment was put in that said that all 1245 property with a mid-point life of 4 years would be in the 3-year class. That was an advantage to some and a disadvantage to others. Because of this, for instance, over-the-road tractors are constructed and engineered in different ways, before ERTA some over-the-road tractors, were depreciated over a 5-year period and others over a 3-year period. We believe that each company should have the option to place their 3-year property in the 5-year class.

Thank you, Mr. Chairman.

Senator DURENBERGER. Thank you very much.

Mr. Motley.

[Mr. Bregman's prepared statement follows:]

Statement Of
Stanley I. Bregman
On Behalf Of
The Truck Renting and Leasing Association
And
The American Car Rental Association

On S. 1758
"Accounting Cost Recovery Simplification Act of 1983"

Before the Taxation Subcommittee
U.S. Senate Committee on Finance
November 17, 1983

My name is Stanley I. Bregman. I am a member of the law firm of Bregman, Abell & Kay. I am testifying today before this committee on behalf of the Truck Renting and Leasing Association (TRALA) and the American Car Rental Association (ACRA). Both of these associations support S. 1758 and emphatically urge passage of it.

TRALA is a trade association representing an industry of over 3,200 companies with locations in every state of the union.

ACRA is a trade association representing more than 500 companies also operating in every state of the United States. Both associations are made up of some large companies, some medium size companies, but primarily small local companies. The overwhelming majority of the members would qualify as small businesses.

We support the open-ended accounting of S. 1758 because it will reduce the number of accounts maintained by companies and it will simplify their accounting for depreciation purposes.

It will also simplify the managing of assets for gains and losses. The accounting procedures are easy to understand and easy to apply.

An open-ended accounting system provides the taxpayer the flexibility to choose in any one year a recovery percentage of the balance in the account less than the maximum provided. This would allow a taxpayer to receive his tax benefits for a given year without adversely effecting future years and this is particularly helpful to the small businessman.

In addition to establishing an open-ended accounting system, S. 1758 would eliminate the investment tax credit basis adjustment. Open-ended accounting system along with the repeal of the basis adjustment would maintain the present value benefits that are enjoyed under existing law.

The basis adjustment enacted last year is a most burdensome, complex and costly accounting procedure to the small business members of both TRALA and ACRA. The basis adjustment adversely affects the financial statements of small businesses because of its impact on their bottom line. This in turn makes it more difficult for businesses to get necessary financing.

Another aspect of S. 1758 supported by TRALA is the election to place property in a 5-year category which under present law must be placed in a 3-year category. When the 1981 tax law establishing ACRS was written all 1245 property with an ADR mid-point life of 4 years or less was put in the 3-year category. For some companies this was advantageous but for others it was not. It was a disadvantage for small trucking companies whose borrowing ability depends on their bottom line after tax profit.

An example of 1245 property arbitarily placed in the 3-year category is over-the-road tractors. These tractors are operated and maintained for different purposes, but under present law all must be in a 3-year category even if they are engineered for longer service life.

For reasons stated we would urge the adoption of S. 1758. It will be beneficial to the members of the associations we represent and we believe it will be beneficial to the other taxpayers and to the U.S. Government.

STATEMENT OF JOHN J. MOTLEY III, DIRECTOR OF FEDERAL LEGISLATION, NATIONAL FEDERATION OF INDEPENDENT BUSINESS, WASHINGTON, DC

Mr. Motley. Mr. Chairman, I am John Motley, director of Federal legislation for NFIB. I want to thank you for the opportunity to appear here today in support of Senator Bentsen's and Senator Wallop's bill for open-ended accounting.

The primary reason that we are supporting this particular piece of legislation is that there is probably nothing that the Congress can do to help small businesses across this country more than to continue to simplify the Tax Code.

Small businesses are at a tremendous disadvantage in terms of the resources that they have available, and also their expertise about the Tax Code. So one of NFIB's primary goals throughout the years has been to seek simplification. That is one of the reasons that we originally supported ACRS, and it is the reason that we are supporting the suggested changes today.

Under current ACRS rules, each separate asset which is considered to be recovery property must be separately accounted for under a system known as vintage accounting. Under an open-ended system, all truck purchases, for ACRS purposes, would be added to one account. A fixed percentage would be consistently applied against the remaining balance in the account, and each year's recovery allowance would reduce the account balance.

The net result is that only one calculation is required and only one account balance is maintained. The reduction in recordkeeping and the resulting simplification in the recovery allowance calculation will be very helpful for small businesses.

Another provision in S. 1758 which would be beneficial to small business gives the taxpayers added flexibility in the recovery property percentage used. This change would further simplify recordkeeping by not forcing a small business to use more recovery property deductions than are needed in any given year.

Under current rules, the full ACRS recovery allowance must be expensed for tax purposes. When a firm has excess deductions over income, a new paperwork and tax problem results because net operating losses must also be tracked. If the taxpayer cannot carryback the excess losses, an NOL schedule as well as a depreciation schedule must be followed.

Under S. 1758, a taxpayer may elect to apply a recovery percentage less the straight-line percentage, or even to place into a longer recovery period. We believe that this added flexibility is extremely important for small firms.

Also, we would like to commend the changes suggested in S. 1785 as far as recapture is concerned. It adds another degree of flexibility and another simplification for small firms, and we feel that it's extremely worthwhile.

NFIB supports the legislation. We hope that, notwithstanding the objections from Treasury, the committee can take a careful look at it and move towards this type of reform as expeditiously as possible, and we will do everything we can to help.

Thank you very much.

Senator DURENBERGER. Thank you.

[Mr. Motley's prepared statement follows:]

NFIB National Federation
of Independent Business

The Guardian of Small Business

STATEMENT OF

JOHN J. MOTLEY III
DIRECTOR OF FEDERAL LEGISLATION

NATIONAL FEDERATION OF INDEPENDENT BUSINESS

Before:	Subcommittee on Taxation and Debt Management of the Senate Finance Committee
Subject:	S. 1758 -- The Accounting Cost Recovery Simplification Act of 1983
Date:	February 24, 1984

Mr. Chairman, on behalf of the more than 560,000 members of the National Federation of Independent Business (NFIB), I thank you for the opportunity to discuss the Accounting Cost Recovery Simplification Act of 1983, introduced by Senator Bentsen and co-sponsored by 7 other members of the Finance Committee.

Simplification of the Internal Revenue Code remains a major priority for NFIB members, and it is within that context that we support the goals of S. 1758. The Accelerated Cost Recovery System (ACRS) itself represents a major simplification of the tax law, and the incentives provided by ACRS are responsible for the financing of billions of dollars of investments in capital assets.

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S. 1758 does not reverse the benefits of ACRS. On the contrary, the bill enhances and further simplifies ACRS in several ways which would be most helpful to small business. The result of these further simplifications will be reduced paperwork and simplified recordkeeping systems, which will result in reduced accounting fees for many small firms.

Open Ended Accounting System for 3 and 5 Year ACRS Assets

Under current ACRS rules, each separate asset which is considered recovery property must be separately accounted for under a system known as vintage accounting. Therefore, if a small trucking company owns 10 trucks, each truck must be listed separately. Assuming they are purchased at different times, the following information must be listed for each truck in a fixed asset account for tax purposes:

a) Purchase Date
b) Description
c) Cost
d) Depreciation Method
e) Current Recovery Allowance
f) Remaining Recovery Balance
g) Current Book Value

Items e, f, and g would need to be redetermined each year as additional recovery allowances are added.

Under the open-ended system, all truck purchases would, for ACRS purposes, be added to one account. A fixed percentage would consistently be applied against the remaining balance in the account and each year's recovery allowance would reduce the account balance. The recovery allowance is calculated at a maximum of 150% of the straight line percentage. For example, trucks which would fall into ACRS category 3 could use a maximum rate of 49.95% of the remaining balance for determining the recovery allowance. The net result is that only one calculation is required and only one account balance is maintained. The reduction in recordkeeping and the resulting simplification in the recovery allowance calculation will be a very helpful simplification for small business.

Flexibility in Setting Recovery Property Percentage

Another provision in S. 1758 which would be beneficial to small business gives the taxpayer added flexibility in the recovery property percentage used. This change would further simplify recordkeeping by not forcing a small business to use more recovery property deductions than are needed in any year.

Under current rules, the full ACRS recovery allowance must be expensed for tax purposes. When a firm has excess deductions over income, a new paperwork and tax problem results because Net Operating Losses (NOL) must also be tracked. If the taxpayer cannot carryback the excess losses, an NOL schedule, as well as a depreciation schedule, must be followed.

Under S. 1758, a taxpayer may elect to apply a recovery percentage less than the straight line percentage, or even to place an asset into a longer recovery period. This added flexibility further simplifies ACRS and helps small business owners avoid unnecessary complications.

Repeal of Basis Adjustment

The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) imposed a basis adjustment on taxpayers wishing to take a full investment credit, thereby reducing the cost recovery allowance. NFIB opposed this reduction in ACRS benefits as being an unwise tax increase and a complication in the tax law. S. 1758 proposes to eliminate the basis adjustment section and restore the full investment tax credit. NFIB supports this change

Change in Recapture Rules

Under current law, when an asset which has been depreciated is sold, the taxpayer may be subject to taxes under section 1245 of the tax code. Under this section, gain which is recognized due to a disposition of recovery property is ordinary income to the extent of prior ACRS deductions.

Under S. 1758, when an asset is disposed of, gain or loss is generally deferred. The amount realized in the disposition reduces the balance in the account, which in turn reduces the recovery allowance.

It has always been a mystery to a small business owner as to why recapture rules exist. However, without quarreling over whether there should or should not be recapture rules, this solution to the disposition of an asset seems to take a middle course which should be satisfactory to all concerned.

Conclusion

The membership of the NFIB support the efforts of Senator Bentsen, Senator Wallop, and their fellow Finance Committee members on S. 1758. We would hope that the Finance Committee would favorably act on this needed simplification of the tax law.

Senator DURENBERGER. Thank you both for your brevity. We appreciate that.

Senator Danforth.

Senator DANFORTH. No questions, Mr. Chairman.

Senator DURENBERGER. Senator Wallop.

Senator WALLOP. Mr. Chairman, I would just ask either or both of the witnesses to respond to the question: How important is it to you that the repeal of the basis adjustment remain intact?

Mr. BREGMAN. Senator, I think it is the most important element of the bill. I mean, the other parts certainly would create a lot more simplicity and are very important, but if you didn't have the basis adjustment repeal in the bill it would be extremely costly and we would no longer have the present value benefits that we have today under present law. So I believe it is very important that the basis adjustment be repealed.

Mr. MOTLEY. Senator, I would agree with that. It is a very important part of the bill.

Senator WALLOP. Would either of you comment on the advisability of trying to do something about eliminating the need for vintage accounting with respect to the investment tax credits?

Mr. BREGMAN. We would certainly be in favor of eliminating the recapture on the investment tax credit. I think that might open up some other problems as far as revenue is concerned, and we would have to approach it in a little different way, because of the problem of revenues.

I would not want to see this bill held up while that problem is being studied, sir. I think it is important that we move ahead.

Senator WALLOP. You were here when the Secretary was here. Would you agree with him that it isn't all that complex to resolve it?

Mr. BREGMAN. Yes, I would say it is not all that complex to resolve it.

Senator WALLOP. Do you think it would probably mean less to small business than it does to other business ventures?

Mr. BREGMAN. I think it is important also to small business. Again, on the recapture, I think you might want to look at being able to measure that against the accelerated depreciation. But that's just one way of doing it. I think it can be done, too, sir.

Senator WALLOP. Thank you.

Thank you, Mr. Chairman.

Senator DURENBERGER. Senator Bentsen.

Senator BENTSEN. Well, first let me thank Mr. Motley and Mr. Bregman for their interest and their support. It's very helpful to us.

But when we talk about the elimination of the basis adjustment, I think what we ought to remember is that the Treasury supported that in the conference deliberations on ERTA. And it would certainly simplify the computation of ACRS for tax purposes and income tax expenses for financial statements.

Senator WALLOP. Their original position to the basis adjustment was opposition to it.

Senator BENTSEN. That's right. I see what you are saying. That's correct.

Senator WALLOP. They did come around.

Senator BENTSEN. Yes. That's right.

But I think it is important for Treasury to remember that the simplification bill, in achieving what it does, can do it without any change in the present value tax benefits available to the taxpayers, and without any long-term revenue loss to the Treasury.

Mr. BREGMAN. Yes, sir.

Senator BENTSEN. Now, you hear a lot of things about the complexities of the Internal Revenue Code. A lot of those complexities are there to try to prevent abuses, but this one doesn't violate the integrity of the Tax Code at all. It just really makes for further simplification, and that's something we all ought to be striving for.

I recognize that we have some new regulations due on ACRS, and some of them have been promulgated, but I don't think that should stop us from moving toward such a worthwhile objective as this one is.

I strongly support the consideration as expressed in this legislation.

I appreciate the hearings this morning.

Senator DURENBERGER. Thank you.

Any other questions?

[No response.]

Senator DURENBERGER. Thank you very much, gentlemen. I appreciate your being here.

Mr. BREGMAN. Thank you.

Mr. MOTLEY. Thank you, Mr. Chairman.

Senator DURENBERGER. We will now move to S. 1857, and the panel consisting of Edward N. Delaney, chairman, Section of Taxation, American Bar Association, Washington, DC; Mr. James A. Joseph, president, Council on Foundations, Washington, DC; Mr. Thomas R. Buckman, president, the Foundation Center, New York, NY; Mrs. Orvill L. Freeman, national president, Girl Scouts of America, Washington, DC, accompanied by Christopher M. Mould, Esq., YMCA of the U.S.A., Washington, DC, Jack Moskowitz, senior vice president, Federal Government relations, United Way of

America, Alexandria, VA, and Brian O'Connell, president, Independent Sector, Washington, DC.

I remind the witnesses that we are operating now with the 3-minute rule on each statement. Your written statements will be made part of the record, and you may proceed.

We will start with Mr. Delaney.

STATEMENT OF EDWARD N. DELANEY, CHAIRMAN, SECTION OF TAXATION, AMERICAN BAR ASSOCIATION, WASHINGTON, DC

Mr. DELANEY. Good morning, Mr. Chairman. I am Edward Delaney, chairman of the Section of Taxation of the American Bar Association. I am accompanied by James Hanson, who is the chairman of our committee on exempt organizations. Our statement represents only the views of the section of taxation, and should not be construed as representing the position of the American Bar Association.

Generally, private foundations have complied with the 1969 Tax Reform Act, but some significant administrative problems do need attention. We support the administrative changes that are recommended by the General Accounting Office.

We submit that the 1969 private foundation legislation has accomplished the objective of Congress to ensure that foundations which receive the benefit of tax exemption operate strictly in the public interest. It is important to preserve the basic framework of the private foundation provisions of the 1969 legislation in order to avoid a situation in which infrequent abuses might recur. Nevertheless, certain aspects of the current rules are so complex or rigid as to impose unnecessary administrative costs on foundations or pose a significant inhibition to additional contributions to foundations. We urge that you remove these barriers to increased private charitable efforts in line with the recommendations set forth in our written statement.

A major step toward simplification of the Internal Revenue Code that Congress could take would be to reduce the complexity of section 170, the provision of the code which regulates the deductibility of contributions. Section 170 presently contains three separate limits on the percentages of one's income which can be deducted as a result of charitable gifts. Complex rules govern the interaction of these percentage limitations. The very complexity of section 170 is an inhibition to making contributions to charity. Section 1 of S. 1857 significantly advances the cause of simplification and we fully support that.

The tax expenditure provisions of the 1969 act prohibit foundations from making grants for lobbying or political purposes, and impose detailed restrictions on foundation grants to individuals or organizations which are not public charities. Interpreting and enforcing these provisions consumes an inordinate amount of foundation and Internal Revenue resources, and we think that such provisions could be cut back substantially.

The self-dealing provisions of the 1969 act impose stringent restrictions on economic relationships between foundations and related persons. The general structure of these prohibitions should be preserved. Congress should, however, consider simplification of these rules.

Current law imposes an automatic first-level penalty tax on foundations that violate the restrictions on taxable expenditures and excess business holdings and certain other provisions of the private foundation rules. Because of the complexity of these rules, inadvertent violations occasionally occur. The Commissioner should be given authority to abate the first-level penalty tax imposed on a foundation where the violation is inadvertent and is corrected during the statutory period.

Revisions are needed in the public support rules of section 509 a(1) and a(2), which for many charities determine whether the organization will be treated as a charity or private foundation. We have detailed more comments on changes in that provision in our written statement.

The experience of our members suggests that private foundation rules have effectively prevented the foundation misconduct at which they were directed, accordingly we believe that the basic framework of these rules should remain intact. However, it is noted that many aspects strongly discourage foundations from supporting many worthwhile charities, and they should be modified accordingly. Thank you.

Senator DURENBERGER. Thank you, Mr. Delaney. Mr. Joseph.

[Mr. Delaney's statement follows:]

PREPARED STATEMENT OF EDWARD N. DELANEY

I am Edward N. Delaney, Chairman of the Section of Taxation of the American Bar Association. We are pleased to submit the views of the Section with respect to the provisions of the Internal Revenue Code affecting private foundations and, more specifically, with respect to the proposals contained in S.1857.

The Section's Committee on Exempt Organizations surveyed its members concerning the private foundation provisions of the Internal Revenue Code and S.1857. Comment has also been sought from other knowledgeable members of the Tax Section. As a result, I can report to you the experience of tax practitioners throughout the country with respect to the 1969 private foundation law.

This statement represents only the views of the Section of Taxation, and should not be construed as representing the position of the American Bar Association.

Generally, private foundations have complied with the 1969 Tax Reform Act. Not the least of the reasons for this high level of compliance is the extensive administrative attention provided by the Internal Revenue Service, which is specifically structured to address the administration and supervision of foundations and other exempt organizations. Such an organizational structure is of considerable assistance in providing the proper focus and attention to private foundation issues.

There is also a high level of professionalism and competence among the Internal Revenue Service personnel dealing with foundation matters, especially at the National Office level. In addition, the Internal Revenue Service has worked to improve its procedures, including the design of Form 990-PF and its instructions, and the quality of publications generally available to the public.

Some significant administrative problems do need attention. For example, the recently issued General Accounting Office study of IRS implementation of the foundation information reporting requirements identified some deficiencies in IRS procedures. We support the administrative changes recommended by GAO, and endorse GAO's conclusion that these relatively minor changes will ensure full foundation information reporting. Overall, the Internal Revenue Service has sought to interpret and apply the 1969 legislation in a reasonable and logical manner.

Before discussing some of the areas of concern, let me give you a general overview of observations of Tax Section members. First, the 1969 private foundation legislation has accomplished Congress's objective - ensuring that foundations which receive the benefit of tax exemption operate strictly in the public interest.

Second, it is important to preserve the basic framework of the private foundation provisions of the 1969 legislation in order to avoid a situation in which even infrequent abuses might recur. Preservation of the integrity of the philanthropic community is important enough to justify the continuation of the current rules.

Third, certain aspects of the current rules are so complex or rigid as to impose unnecessary administrative costs on foundations or pose a significant inhibition to additional contributions to foundations. Private philanthropy is important, especially as it motivates grass roots initiatives to solve society's problems. We urge that you remove these barriers to increased private charitable efforts in line with the following recommendations.

I

CONTRIBUTIONS TO FOUNDATIONS

A major step toward simplification of the Internal Revenue Code that Congress could take would be to reduce the complexity of section 170, the provision of the Code which regulates the deductibility of contributions to charity, as section 170 presently contains three separate limits on the percentage of one's income which can be deducted for charitable gifts. The deductible amount depends on the character of the donee and the nature of the donated property. Complex rules govern the interaction of these percentage limits. Contributions to private foundations are subject to the most stringent limitations.

Current law also provides different rules, depending on whether the donee is a public charity or a private foundation, with respect to the portion of the value of donated property which can be claimed as a charitable deduction. If the donee is a public charity, the full fair market value is generally deductible; if the donee is a private foundation, the value of the deduction is reduced very significantly. Thus, there are almost insurmountable disincentives to lifetime contributions to foundations.

The very complexity of section 170 is an inhibition to contributions to charity. Moreover, the less favored status of foundations obviously inhibits gifts to foundations.

The Tax Section has long been concerned with this problem, and 11 years ago recommended, as a partial solution, the establishment of uniform percentage limitations and carryover rules for all charitable contributions.

Section 1 of S.1857 significantly advances the cause of simplification of section 170. Uniform limitations and carryover rules for all charitable contributions, including charitable contributions to private foundations, would be established by this proposal. The Section of Taxation urges the adoption of this proposal. The private foundation rules provide an effective safeguard against foundations' misconduct. There is simply no need for the more restrictive deduction rules which currently apply to gifts to foundations.

II

RESTRICTIONS ON FOUNDATION OPERATIONS

A. The Taxable Expenditure Rules. The taxable expenditure provisions of the 1969 Act prohibit foundations from making grants for lobbying or political purposes, and impose detailed restrictions on foundation grants to individuals or organizations which are not public charities. The Tax Section recognizes and endorses the general objectives of the taxable expenditure rules. However, interpreting and enforcing this provision consumes an inordinate amount of foundation and Internal Revenue Service resources. Congress's objectives could be better accomplished at substantially lower costs with the following simplifying changes in the taxable expenditure rules.

First, under current rules foundations are permitted to award scholarships and make educational loans only after completing detailed, complex, and time-consuming steps required to obtain advance Internal Revenue Service approval of their grant-making procedures. Rather than attempt to comply with these burdensome requirements, many private foundations, especially those outside major urban areas, have simply stopped granting scholarships. Even those foundations which have not ended their scholarship or loan programs since 1969, have generally not expanded them.

Moreover, Internal Revenue Service rules impose particularly onerous restrictions on scholarship programs administered by company-sponsored foundations. In implementing current law, the Internal Revenue Service has developed complex guidelines designed to ensure that scholarships and educational loans are not used as a means of providing disguised compensation to employees of a company affiliated with the foundation. While we acknowledge the legitimacy of the Service's concern, we share the view that undue emphasis has been placed upon avoiding "hidden compensation" to the detriment of advancing college and graduate education of many needy individuals.

We encourage you to examine the administrative balance which has been struck, and to give serious consideration to redirecting the focus of the scholarship and loan rules so that expanded educational opportunities through foundations' scholarships and loans will be more readily available. In our view, the diminution of foundation scholarship programs caused by these rules is not balanced by any corresponding benefit. Congress could readily simplify these rules without creating a potential for abuses. This could be done by enacting specific criteria to be satisfied by scholarship and loan programs.

S.1857 does not now contain any proposal to implement this recommendation. We urge that such provisions be included. The Section of Taxation would welcome the opportunity to work with the Committee staff on such a simplification.

Second, the expenditure responsibility rules - that is, the detailed recordkeeping and reporting requirements applicable to foundation grants to non-public charities - are more complex and burdensome than required to accomplish Congressional objectives. An important role of foundations is to provide "seed money" grants to promising new charitable endeavors. However, since such new organizations often have not qualified as public charities, they can receive foundation grants only if the foundations comply with the expenditure responsibility rules.

To comply, a foundation must (1) conduct a pre-grant investigation of the grantee, (2) enter into a detailed written grant agreement, (3) obtain at least annual reports from the grantee concerning the use of the grant funds, and (4) file annual reports with the IRS concerning the grant. Faced with these rules, many foundations, particularly small foundations which generally have no staff, simply do not make expenditure responsibility grants. This means that many needed and worthwhile human service organizations (and similar new charitable projects) simply cannot obtain foundation support. We believe that simplification of these rules would encourage many more foundations to make grants to new worthwhile organizations, while maintaining adequate safeguards against a misuse of foundation funds.

Section 2 of S.1857 addresses this problem by removing the expenditure responsibility requirements for grants to an organization of $25,000 or less per year. While this proposal would provide significant simplification for fairly modest grants, it would not solve the problem for the more significant grants. The Section of Taxation urges you to explore additional means of minimizing the burdens of the expenditure responsibility requirements without creating a potential for abuse. We would be pleased to submit specific proposals for consideration by your staff in the near future.

A third, related problem arises from limitations imposed by current regulations on the ability of foundations to rely on official IRS determinations as to a grantee's public charity status. In many common situations, a foundation seeking to determine whether a grantee is a public charity - and thus whether the foundation must exercise expenditure responsibility - cannot rely on an IRS determination of the grantee's status.

Instead, it must make its own detailed investigation to determine whether its grant may cause the grantee to lose its tax-qualified status. This requirement imposes a substantial administrative burden on foundations. It constitutes a significant deterrent to grants to other than well-established public charities, and, most importantly, reduces the number of "seed money" grants by foundations to new, innovative and locally-motivated charitable programs.

Section 2 of S.1857 authorizes a foundation to rely on an IRS determination of a grantee's status, unless the foundation knows of a change in the grantee's status. The Section of Taxation urges the Congress to give favorable consideration to this proposal.

B. The Self-Dealing Rules. The self-dealing provisions of the 1969 Act impose stringent restrictions on the economic relationships between foundations and related parties. The general structure of these prohibitions should be preserved. Congress should, however, consider simplification of two important aspects of these rules.

Under current law, all lineal descendants - however remote - of a substantial contributor to a foundation are disqualified persons subject to the self-dealing rules. Accordingly, foundations must keep track of all such descendants - even where the donor is no longer living and the descendants have no involvement with the foundation - in order to avoid inadvertent violations of the self-dealing rules. This requirement imposes a substantial and unnecessary administrative burden on foundations, one which increases with each passing generation. Section 2 of S.1857 would narrow the definition of "family member" to include only children and grandchildren of substantial contributors, and the Section of Taxation believes that this would alleviate the burden without undermining the objectives of the self-dealing rules.

In addition, current rules should be changed to allow a disqualified person to provide goods, services or facilities to a private foundation where the disqualified person can demonstrate to the IRS in advance that the foundation will thereby obtain the goods, services, or facilities at significantly less cost than would be the case if such item were purchased or leased from a third person.

The Internal Revenue Code presently allows a foundation to pay reasonable compensation to disqualified persons for needed personal services. Extending this concept to allow disqualified persons to provide goods, services or facilities at a reduced cost to foundations would allow foundations to realize important benefits, without creating a potential for abuse. S.1857 does not contain such a provision. The Section urges the inclusion of such a provision, and would be pleased to submit such a proposal for your consideration.

C. Inadvertent Violations. Current law imposes an automatic first level penalty tax on foundations which violate the restrictions on taxable expenditures, excess business holdings, and certain other provisions of the private foundation rules. Because of the complexity of these rules, inadvertent violations occasionally occur.

Moreover, current law does not provide any "grace period" for an organization which, due to a change in funding sources or for some other reason, ceases to qualify as a public charity, and thereby becomes instantly subject to all of the private foundation rules. Imposing a penalty tax on foundations for such inadvertent or unanticipated violations does not promote increased compliance, and, instead, simply removes from foundations funds which would otherwise have been available for charitable programs. The automatic nature of these initial penalty taxes, and their continued accumulation during the period of audit and administrative review by the IRS, forces many foundations to bypass administrative review of a questionable situation and instead proceed directly to litigation.

Accordingly, the Tax Section supports the proposal contained in Section 2 of S.1857 that the Commissioner be given authority to abate the first-level penalty tax imposed on foundations where the violation is inadvertent, and is corrected within the statutory correction period. The Section also recommends that this authority be explicitly extended to apply where the violation is the result of an unanticipated change of status, and that Congress remove the accumulation of these taxes for that period. This will allow an orderly and thorough administrative review by the IRS.

D. Administrative Expenses. Current law requires that a private foundation annually distribute or expend for charitable purposes an amount no less than five percent of the current fair market value of the foundation's investment assets. The administrative expenses incurred by the foundation in carrying out its charitable program (but not in investing its assets) are taken into account in satisfying this minimum distribution requirement. There have been various proposals made for limiting the amount of administrative expenses which qualify for this purpose, although no such provision is contained in S.1857.

The Section of Taxation recommends that thorough consideration be given to the possible ramifications of any such proposed limitation on the qualification of administrative expenses under the minimum distribution rules. While the Section is in full accord with those who wish to ensure that foundation assets are used properly and efficiently for charitable purposes, and we endorse without reservation the principle that no individual or private person should be allowed to take improper advantage of charitable funds, we do not believe that there is any pattern of abuse in the payment of salaries or other administrative expenses by foundations. Therefore, we question whether additional, complex legislation is needed to address a problem which appears to us to be more theoretical than real.

Current law expressly precludes a foundation expenditure for a purpose which is unnecessary, unreasonable in amount or not in furtherance of the foundation's charitable purposes. Moreover, both the foundation and the officer or trustee may be penalized for a payment of unreasonable compensation or fees to the foundation official. We are of the view that current law contains adequate safeguards against individual items of expense which are unreasonable in amount.

We suggest that the broad diversity of foundation programs and objectives renders questionable any fixed, standardized prescription of a maximum level of foundation administrative expense.

Many foundations pursue a traditional pattern of grant-making which allows standardized review, evaluation and reporting procedures to be followed, with the result of relatively modest administrative expenses. Many other foundations pursue aggressive, innovative approaches to grant-making, seeking to generate their own possible solutions to the problems confronting society. This type of "involved grant-making" is more demanding, time-consuming and intensive than more traditional patterns of grant-making.

We submit that both approaches are valid and beneficial to society, and therefore, we would be hesitant to recommend an artificial limitation on aggregate expenditures which might adversely affect the more intensive patterns of grant-making favored by many of the most thoughtful and responsible foundation managers. This subject warrants careful and deliberate examination by the Congress before additional legislative limitations are adopted.

III

THE PUBLIC SUPPORT RULES

Revisions are needed in the public support rules of sections 509(a)(1) and (a)(2) which, for many charities, determine whether the organization will be treated as a public charity or a private foundation. The existing rules inappropriately classify as private foundations many organizations which are directly accountable to the public, and for which the detailed restrictions of the private foundations rules are unnecessary. S.1857 does not address these problems. The Section urges the Congress to expand the scope of its work by considering revisions of these classification rules. We would be pleased to work with your staff in this regard.

Two aspects of the existing public support rules make it unnecessarily difficult for many new organizations to qualify as public charities. First, in determining whether an organization has received the required percentage of its total support from qualifying "public sources," current rules include large gifts and grants in the base against which the public support level is measured unless a relatively narrow "unusual grant" exception applies. As a result, a new organization may be effectively precluded from public charity status if it receives a single large gift or grant. Broadening the unusual grant exception would significantly alleviate this problem.

Second, current rules allow new organizations only five years to develop the required level of public support in order to avoid private foundation status. Many worthwhile new organizations simply cannot attract the required public recognition of, and support for, their programs within this five-year period. Extension of the five-year period to perhaps ten or twelve years should be considered.

Congress should also consider relaxing the existing rule which bars public charity status under section 509(a)(2) if an organization receives more than one-third of its total support from investment income. This rule poses a particular problem for numerous museums, libraries, and similar organizations which operate as public charities, but which have been fortunate enough to receive significant endowment funds from their supporters. To avoid private foundation status, such organizations must either limit their investment income or compete with other charities for additional current contributions, or even pursue both courses. These unforeseen and undesirable results of current law could be alleviated by increasing the level of permitted investment income or by eliminating the investment income limitation for organizations which by the nature of their operations actively carry out a charitable program commensurate with their financial resources.

Beyond these technical changes to the existing Code provisions, we encourage the Congress to make a careful review of the extent to which the private foundation definitions unintentionally sweep into the complexity of the 1969 legislation those small, locally-supported organizations which almost no layman would consider a private foundation. We are concerned about the ability of organizations such as urban redevelopment groups, historic preservation societies and social relief agencies to obtain and maintain the status of public charities. These organizations do not hold endowments for the purpose of generating income to make grants; rather, they are usually directly focused upon specific community concerns, which a relatively small group of volunteers decides should be given attention. Although we can produce no statistical evidence to support our views, we believe that the difficulties under current law of obtaining and preserving public charity status for such groups fosters an attitude of "let government solve the problem" or "let the church do it." This is an unfortunate consequence of complexity. We would welcome the opportunity to explore with your staff means of expanding the definition of "public charity" without jeopardizing the protections of the public interest which are contained in the 1969 Act.

CONCLUSION

The experience of our members suggests that the private foundation provisions of the 1969 Tax Reform Act have effectively prevented the foundation misconduct at which they were directed. Accordingly, we believe that the basic framework of these rules should remain intact. However, as discussed above, important aspects strongly discourage foundations from supporting many worthwhile charitable activities and deter additional contributions to foundations. We believe that Congress should carefully consider appropriate changes in the private foundation rules to eliminate these barriers to the charitable activities of private foundations, and we believe that the provisions of S.1857 provide a significant improvement in many of the areas needing Congressional attention.

STATEMENT OF JAMES A. JOSEPH, PRESIDENT, COUNCIL ON FOUNDATIONS, WASHINGTON, DC

Mr. JOSEPH. Mr. Chairman, I am delighted to have this opportunity to appear before you. I want to thank you for holding these hearings so that we might have an opportunity to examine the impediments to foundation philanthropy. As you know, I am president of the Council on Foundations, representing nearly 1,000 grantmaking organizations nationwide. I want to make four brief points.

First of all, private foundations have been in the past, and continue to be in the present, a major force for social good in American life. Most Americans have, at one time or another, benefited from the charitable spirit of a close or distant neighbor acting through a private foundation. Whether it was the development of a network of free public libraries, the birth of public television, the development of polio vaccine, or emergency food relief, private foundations have played a unique role in meeting public needs and sustaining our democratic society.

My second point. This, Mr. Chairman, is a watershed moment in the history of private foundations. While we are proud of their accomplishments, we must report that they are increasingly an endangered species. The drop in their birth rate is a matter of grave concern to public policy. Those who collect data are now in agreement that a significant decline has occurred.

My third point. We strongly support S. 1857 because we believe that it will reverse the decline in the formation of new foundations by removing present disincentives. We are especially pleased therefore that the primary section of S. 1857 would remove disincentives and make other adjustments which would substantially improve the operation of the 1969 act without endangering its intent, an intent we strongly support.

Fourth and finally, we are greatly pleased that the Ways and Means Committee has therefore recognized the existence of impediments to the formation of new foundations. But at the same time, we are deeply concerned about the proposed restrictions on administrative costs. As you know, Mr. Chairman, I spent a number of years as head of several foundations, which were able to get a much better return on their philanthropic dollar because they invested in professional staff. I submit that the proposed administrative cost reduction would discourage smaller foundations from hiring professional staffs, would discourage creative grant making, and would discourage large foundations from providing technical assistance to grantees.

And finally, I share a concern for necessary and reasonable administrative costs, but present rules are sufficient to ensure that the public interest is served, while the proposed rule would create new complexities without providing any new benefits. Mr. Chairman, you and your colleagues on this subcommittee have long supported private efforts to support the public good. We hope that you will agree that we need to strengthen this vital sector of American life and that you will move quickly to make S. 1857 public policy. Thank you very much for the opportunity to appear before you.

Senator DURENBERGER. Thank you very much. Mr. Buckman.

[The prepared statement follows:]

TESTIMONY OF JAMES A. JOSEPH, PRESIDENT, COUNCIL ON FOUNDATIONS

MR. CHAIRMAN, Members of the Subcommittee, my name is James A. Joseph, and I am President of the Council on Foundations. I am very pleased to have this opportunity to come before you to support S. 1357. We are proud of the contributions made by private foundations and the improvements that have been accomplished since the Tax Reform Act of 1969. It is our hope that this hearing will clarify the need for stimulating the creation of new foundations.

Organized in 1949 to promote responsible and effective grantmaking, the Council on Foundations shares with the Congress a desire to ensure that the public interest is well-served. We now have within our membership 960 grantmaking organizations including 630 private independent foundations, 160 community foundations, 100 corporate foundations, 40 corporate donors without foundations, and 20 public charities with substantial grantmaking programs. Council members presently hold over 50 percent of all foundation assets in the country.

In addition to our work in government relations, the Council provides numerous services to its members and the public including direct technical assistance, professional development training, and a wide variety of publications.

I. HISTORICAL ACCOMPLISHMENTS AND PRESENT ACTIVITY

The bill before you today seeks to correct certain administrative difficulties, tax code restrictions, and other more technical issues; but in this process, I am concerned that you not lose sight of the end product, the purpose for which private foundations exist.

It is fitting, therefore, to take a brief inventory and remind ourselves of the contributions initiated by American foundations over the past many years. Even a limited glimpse of this history reveals such landmarks as:

- Early assistance to Dr. Jonas Salk's polio-vaccine research
- Foundation-sponsored research instrumental in greatly reducing or eliminating other diseases such as typhoid and yellow fevers, malaria and tuberculosis
- Grants to sociologist Gunnar Myrdal which enabled him to complete research for publication of An American Dilemma, which shocked the nation into awareness of the unequal status suffered by its black citizens
- Development of a network of free public libraries now in use in cities across the United States and Canada
- Foundation support for the research base leading to our present understanding of DNA. This cracking of the "genetic code" mechanism that shapes all plant and animal cells has been called "the single most significant advance in biology in the 20th Century"
- Foundation backing for the birth of public television and the use of television as a teaching tool. More specifically, foundations have been instrumental in supporting the Children's Television Workshop which produces Sesame Street, the highly successful program for preschool children now seen in 50 countries.

With each passing year, new needs and problems come to the forefront of concern. The private foundation, with its ability to respond rapidly and with flexibility, is uniquely suited to react to emerging needs. Let me share with you just three such examples of recent grant awards.

Shortage of Math and Science Teachers

The AMOCO Foundation recently announced a grant to the Chicago Public School System to provide educational enrichment for 80 math and science teachers from the 7th and 8th grades. The teachers, chosen for their motivation, experience and leadership ability, will take 16 extra semester-hours in the summers and evenings to expand their teaching skills, and ultimately to pass them on to their peers. The improved training of these teachers is expected to qualify more students for participation in the Principal's Scholars Program (PSP) which is also funded by AMOCO. PSP currently has 1800 participating high school students in Chicago, and is designed to increase the number of minority college graduates in engineering and science.

Emergency Loans

Approximately 20 emergency loan and grant funds have been established by foundations around the country. Almost half of them have been initiated in the past two years in response to the cutbacks in governmental funding. One such example is the Basic Human Needs Fund established by a grant of $1.5 million from the William Penn Foundation to provide money to nonprofit organizations to help meet the needs of Delaware Valley residents in Pennsylvania and New Jersey. The grants are made for short-term emergency assistance to the poor for food, clothing, fuel, shelter, and health care. In its first four months of operation in 1982, grants of $750,000 had been made to 78 nonprofits to aid 20,000 families.

Teenage Pregnancy

For several years, numerous foundations have become deeply involved in the critical issue of teenage pregnancy. As one example, the C.S. Mott Foundation has granted over $2.3 million for projects designed to reduce the negative effects of teenaged childbearing. Because current non-foundation funds focus primarily on pregnancy prevention, the Mott Foundation has shifted it emphasis to ameliorating the negative consequences of teenage pregnancy once it has occurred, and the mother has opted for delivery.

II. PRIVATE FOUNDATIONS: A WORKING DEFINITION

Mr. Chairman, it is important for me to emphasize that there exists today an immense variety of private foundations. More importantly, I hope you will see that this diversity is one of our most valued assets. I am happy to report to you that despite the strict limitations and definitions of the Tax Reform Act of 1969, private foundations today continue to play a vital and active role in American philanthropy. Based on information provided by the Foundation Center, there are 21,759 private grantmaking foundations on record (496 are operating foundations). These foundations hold assets of $45.4 billion and make grants in excess of $3.6 billion.*

Despite the fact that our coat has many colors, Mr. Chairman, we should, nonetheless, suggest to you a working definition before continuing with our presentation. It is generally understood that a "private foundation" is a nongovernmental, nonprofit organization with its own funds, managed by its own trustees or directors, which serves to maintain or aid charitable, educational, religious, or other activities serving the public good. Unlike most public charities, private foundations are usually given an endowment of cash or securities by a donor who may be an individual, a family, or a corporation. This endowment is invested and the proceeds are used to make charitable grants or to operate charitable programs. Some donors, especially those who set up small foundations, continue to make donations to the foundation during their lifetime, and then leave the foundation a sizable bequest in their wills. Other donors make a single large gift either before or after death.

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* The Foundation Center in compiling this widely accepted data on private foundations must rely in large part on tax returns submitted to IRS. Since the returns for a given year are due four and a half months after the close of the tax year, and because IRS processing time involves additional delay, the figures cited here are derived from the Center's recent analysis of the IRS transactional tape for 1982.

It should also be noted that the General Accounting Office has identified the total number of private foundations as approximately 28,000. This higher figure includes approximately 5,000 organizations that are reclassified as private foundations for failing to attract the minimum public support required to maintain status as a public charity. These "burned out" public charities are not grantmaking foundations. For example, in one issue of the Internal Revenue Bulletin (April 19, 1983), the IRS published a list of 137 "former public charities" now classified as private foundations. Included on that list are such organizations as: the Evangelist Motorcycle and Prison Ministry, Friends of Eun Kwang Won, All Seasons Riding Association, Prometheus Ukranian-American Male Chorus of Philadelphia, and Operation Bliss, Inc.

Comparison with Public Charity

Public charities on the other hand generally obtain their support through fundraising appeals to the general public. In addition to their "public" source of funds, public charities are different from private foundations in other ways. When the 1969 Tax Reform Act provided the first legal definition of private foundations, it established a comprehensive list of restrictions under which all private foundations must operate. The 1969 Act also imposed a much more comprehensive and detailed set of public reporting requirements on private foundations. By comparison, a public charity -- deriving its funds from public sources -- is not subject to the same limitations on its activities, nor is it required to report its activities in as great detail to the Internal Revenue Service (IRS).

III. THE UNIQUE ROLE OF PRIVATE FOUNDATIONS

Eighteen years ago, Mr. Chairman, the Treasury Department published a landmark report on private foundations. Following on the heels of earlier Congressional investigations, this 1965 report systematically reviewed the criticisms of foundations and served as the major study leading to the hearings of 1969, and the resulting Tax Reform Act which strictly limited foundation activity.

Despite the criticisms contained in that report, it is significant to point out that the Treasury Department also found great value in private foundations, both historically and for the future. Here in part is what Treasury said:

> "Private philanthropic organizations can possess important characteristics which modern government necessarily lacks. They may be many-centered, free of administrative superstructure, subject to the readily exercised control of individuals with widely diversified views and interests. Such characteristics give these organizations great opportunity to initiate thought and action, to experiment with new and untried ventures, to dissent from prevailing attitudes, and to act quickly and flexibly. Precisely because they can be initiated and controlled by a single person or a small group, they may evoke great intensity of interest and dedication of energy. These values, in themselves, justify the tax exemptions and deductions which the law provides for philanthropic activity.
>
> Private foundations play a significant part in the work of philanthropy. While the foundation is a relatively modern development, its predecessor, the trust, has ancient vintage. Like its antecedent, the foundation permits a donor to commit to special uses the funds which he gives to charity. Rather than being compelled to choose among the existing operating organizations he can create a new fund, with its own areas of interest and emphasis. His foundation may encourage existing operating organizations to develop in new directions, or it may lead to the formation of new organizations. Even if it does neither, it reflects the bents, the concerns, and the experience of its creator; and it thereby increases the diversity of charitable works. In these ways, foundations have enriched and strengthened the pluralism of our social order."

For example, Project CARE (Chemical Abuse Reduced by Education) is a successful program to reduce alcohol and other drug use, abuse, and dependency among school-age children. Operating in 64 public school districts in five Northeastern Ohio counties, and funded by several foundations (The Cleveland Foundation, the George Gund Foundation, the Martha Jenning Foundation, and the Kaiser Permanente

Foundation), this program has trained parents, teachers, counselors, administrators and staff in the intervention, treatment, and rehabilitation of students affected by drug or chemical abuse.

Over 1,200 adolescents have been sent to in-patient or out-patient treatment programs, and over 1,500 students were placed in extensive in-school and out-of-school counseling programs. At a time when schools are struggling with dwindling resources, such an innovative and comprehensive approach to this serious problem would never have started without the support of foundations.

Via the endowment mechanism, a donor can continue the ability of a private foundation to respond to emerging (and emergency) needs for years to come. The funds are not expended in one lump sum, nor locked into an operating budget that constantly needs refilling. The foundation can use this uncommitted annual income to help organizations meet new challenges in new ways, ways that could never be tried if the grantee had to rely on its own operating budget. By choosing a private foundation, the donor is given the opportunity to make a substantial impact over time in an area too complex for quick solutions.

Grants from private foundations made in an independent, and unfettered atmosphere provide an unusual and valuable source of inspiration and creativity. Once again, the Treasury Report of 1965 said it well:

> "Private foundations have also preserved fluidity and provided impetus for change within the structure of American philanthropy. Operating charitable organizations tend to establish and work within defined patterns. The areas of their concern become fixed, their goals set, their major efforts

> directed to the improvement of efficiency and effectiveness within an accepted framework. Their funds are typically consigned to definite -- and growing -- budgets. The assets of private foundations, on the other hand, are frequently free of commitment to specific operating programs or projects; and that freedom permits foundations relative ease in the shift of their focus of interest and their financial support from one charitable area to another. New ventures can be assisted, new areas explored, new concepts developed, new causes advanced. Because of its unique flexibility, then, the private foundation can constitute a powerful instrument for evolution, growth, and improvement in the shape and direction of charity."

Before leaving this point, Mr. Chairman, I believe it is important to stress that foundations are also extremely concerned with meeting the continuing need of their communities. Accordingly, many foundations direct their giving to more established institutions by supporting the good works of their local hospitals, churches, schools, and universities. In fact, Mr. Chairman, many foundations do both: support the traditional institutions of their community, and provide an increasing flow of venture capital for new causes and new areas of concern.

IV. THE LIMITATIONS OF PRIVATE FOUNDATIONS

Our presentation to this Subcommittee would be incomplete if we did not say a word or two about the limitations that foundations face. While we are proud of the many accomplishments we have made and the success stories we have supported, we are very mindful as well that our efforts are only a small part of the total private sector.

When viewed in the context of total annual charitable giving, private foundations contribute 5.2 percent of all gifts made. The most recent publication of Giving U.S.A., prepared by the American

Association of Fund-Raising Counsel, provides the following breakdown for 1982:

	Contributions (in billions)	Percent of Total
Individuals	$48.69	80.7%
Bequests	5.45	9.0%
Private Foundations	3.15	5.2%
Corporations (including corporate foundations)	3.10	5.1%

Private foundation holdings are dwarfed by the $794 billion in assets held by public and private pension plans. Foundation assets total less than one year of charitable giving by individuals, and are only one third of the annual budget of the Department of Health and Human Services.

More specifically, it is far beyond the limits of private foundations to fill the gap created by recent cutbacks in Federal funding (estimated at over $107 billion in the years 1982-86).* That is not to say that private foundations have ignored these new developments. In fact, budget cutbacks have been the very focus of many policy considerations of foundations for some time now. But the very simple fact remains that private foundations cannot replace government services. To even attempt such a feat would put us out of business very quickly.

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*Lester M. Salamon, The New Federalism, The Federal Budget and the Nonprofit Sector, April 14, 1983. This figure represents enacted and proposed changes in Federal spending in fields where nonprofit organizations are active.

V. THE 1969 TAX REFORM ACT: 14 YEARS LATER

In 1969 the Congress determined that the primary safeguard against foundation misconduct should be comprehensive legal restrictions actively enforced by the Internal Revenue Service. Accordingly, Congress enacted a regulatory framework governing virtually every major aspect of foundation activity. These restrictions include a requirement that all foundations pay out each year at least 5 percent of their asset value for their charitable purposes. Congress also adopted strict prohibitions on many activities, including:

- o Self-dealing: direct and indirect transactions between foundations and their "disqualified persons" (including foundation managers, substantial contributors and their family members) are not permitted. Examples of such transactions are the sale or exchange of property, the lending of money, or the extension of credit.
- o Excess business holdings: generally a private foundation together with its disqualified persons may not hold more than a limited percentage (usually 20%) of the voting stock of a business corporation.
- o Jeopardy investments: foundations may not invest funds in any way that would jeopardize the carrying out of its exempt purpose.
- o Grants to non-public charities: grants to organizations not officially recognized as charitable institutions are not permitted without performing detailed record-keeping

requirements including reporting such grants to the Internal Revenue Service. These requirements are commonly referred to as exercising "expenditure responsibility."

- Other prohibited expenditures: very stringent restrictions are imposed on grants or expenditures for lobbying, influencing elections, carrying on voter registration drives, or making grants to individuals for study or travel.

To support these prohibitions, Congress added a series of penalty taxes that could be levied against both the foundation and its managers when violations occurred. To aid in the enforcement of these new requirements, Congress also established an excise tax (now 2 percent of foundations' net investment income) to pay for the more extensive auditing and regulatory supervision that the IRS would be required to perform.

In short, there now exists a comprehensive legal mechanism ready to be used to remove any abuses should they occur. The Council fully supports the fundamental structure of these rules, and their thorough enforcement by the IRS.

In summing up the years of experience under the 1969 Act, Mr. Chairman, we would submit to you that — for the most part — the rules are working well, and have proven to be beneficial. Although they were initially greeted by private foundations with great dismay, we have learned not only to live with them, but to view their benefits as helpful in keeping the field free from those whose motives may not be primarily charitable.

However, we do believe that the 1969 Act could stand some adjustments in several areas. Of more importance, we believe the Act has had one very serious and troubling effect: it has greatly reduced the growth rate of new foundations. We believe this retarded growth rate is directly attributable to the strong tax disincentives for giving to private foundations.

VI. MAJOR CONCERN: Tax Disincentives for Gifts to Foundations and the Serious Decline in the Formation of New Foundations

Under existing income tax rules, charitable contributions to private foundations during the lifetime of the donor generally receive significantly less favorable tax treatment in three respects when compared to similar contributions to other charities: first, while a donor can deduct the full value of appreciated property given to a public charity, he or she can deduct only a fraction of that amount if the same property is given to a foundation; second, while deductions for contributions to private foundations are subject to a ceiling of 20 percent of the donor's annual income, substantially higher ceilings apply to gifts to public charities; and third, while contributions to public charities in excess of these annual ceilings may be deducted in future years, this "carryover" does not apply to contributions made to private foundations.

While some of the different treatment of private foundations precedes 1969, it was in that year that these disincentives reached their full height. There is a clear consensus among experienced foundation officials that these discriminatory rules have severely affected the formation of new foundations. The creation of foundations with assets over $1 million dropped sharply after 1969: according to The Foundation Center 837 were started in the 1960's and only 334 in the 1970's, a drop of 60 percent. In a very recent study (January, 1984), the General Accounting Office (GAO) reviewed IRS data on the formation of private foundations of all sizes. The GAO found that 10,077 grantmaking foundations were formed during the 1960's, and only 4,143 were formed in the 1970's, a drop of 59 percent (Statistical Analysis of The Operations And Activities of Private Foundations, GAO/GGD-84-38, January 5, 1984). Unfortunately, these figures tell only part of the story; as a percent of Gross National Product, assets of foundations have dropped approximately 36 percent from 1969 to 1981.

It is our firm belief that the tax disincentives are no longer needed to accomplish the objectives for which Congress enacted them. As evidenced by the legislative history, enactment of these restrictions reflected Congressional concern that some foundations were not making reasonable current distributions to operating charities and that high-income donors were realizing a greater "profit," at the Treasury's expense, by donating highly appreciated property than by selling it and paying tax on the capital gain. Congress has directly and effectively addressed both concerns in subsequent legislation, and has thus eliminated entirely the need for the special restrictions on gifts to private foundations.

The major focus of S. 1857 is to eliminate this discriminatory treatment of lifetime gifts to private foundations. We strongly support this legislation.

VII. OTHER IMPEDIMENTS

While removal of the tax disincentives on gifts to private foundations is our most serious concern, there are several other issues that we feel your Subcommittee should examine closely. Changes in the law to address these concerns would have two major results: 1) more flexibility in the making of grants, especially to newly formed organizations, and 2) fewer dollars lost to unnecessary tax-required administrative or penalty costs, and thus more funds available for charitable purposes.

Impediment: 2 Percent Tax on Foundation Investment Income

While every other class of charitable organization is entirely exempt from tax on income from its passive endowment, current law imposes a 2 percent tax on the investment income and realized capital gains of private foundations. In fiscal year 1982 this tax reduced foundation resources by over $93 million dollars, and for 1983 this figure is estimated at $112 million. More significantly, each dollar of tax revenue collected by the government reduces by one dollar the amount which foundations are required by law to distribute annually for charitable purposes. In short, it is not a tax on foundations but a tax on foundation grantees. Designed originally to cover the cost of IRS auditing and supervision of private foundations, it generates today over 16 times the costs involved. According to IRS estimates, the cost for monitoring the whole field of exempt organizations is approximately $33 million annually, and the cost of supervising private foundations alone is about $6.7 million.

Foundations throughout the country find this tax both unfair and excessive. In fact, the Treasury Department testified on June 27, 1983 in hearings before a House subcommittee: "We have some difficulty justifying a tax on private foundations alone among tax-exempt organizations to finance supervision of all exempt organizations." More reasonable alternatives are clearly available, even if it is accepted that foundations ought to bear the cost of IRS supervision. While reduction of this tax is not part of S. 1857, we would strongly urge the Senate to reduce the tax to a flat one percent to bring the revenue generated more in line with the oversight costs of IRS.

Impediment: Reliance on IRS Determinations of Grantees' Tax-Qualified Status

Foundations are required to comply with detailed record-keeping and reporting requirements — commonly referred to as exercising "expenditure responsibility" — if they make grants to organizations which are not classified as public charities. The applicable regulations take the position that in important circumstances a foundation contemplating a grant cannot, in determining whether the grantee is a public charity, rely on an official IRS ruling as to the grantee's status. Because of this rule, many foundations feel obliged to devote substantial administrative resources to making their own independent investigations of grantees' sources of financial support. As a practical matter, such investigations almost invariably confirm the grantees' public charity status already recognized by the IRS.

Thus, the only effect of the investigation is to consume foundation resources which would otherwise be available to support charitable activities. S. 1857 would eliminate this unnecessary administrative cost by permitting foundations, in making grants, to rely on official IRS rulings recognizing the public charity status of potential grantees.

Impediment: Chilling Effect of Expenditure Responsibility Rules

Foundations must comply with detailed record-keeping and reporting requirements with respect to any grant, no matter how small, if that grant is made to an organization which is not a public charity. These "expenditure responsibility" requirements include a pre-grant investigation, a written grant agreement, periodic accountings from the grantee, and the filing of annual reports with the IRS. These requirements are particularly burdensome to small foundations without staff, and even some large foundations may decide to forego small grants to nonpublic charities in order to avoid this drain on their administrative resources. As a result, many small-scale but highly beneficial charitable activities cannot attract foundation support. The chilling effect of the expenditure responsibility rules has made it increasingly difficult for newly emerging, community-based organizations to obtain badly needed seed money grants to get them started. In fact, information gathered by the Council over the years clearly shows that the vast majority of private foundations do not make small grants requiring expenditure responsibility. The evidence is also clear that many more foundations would consider such grants absent these requirements. S. 1857 would provide strong encouragement for this important aspect of foundation philanthropy by eliminating the expenditure responsibility requirements if the total grants by a private foundation, and all related foundations, to a grantee during a given taxable year do not exceed $25,000.

Impediment: Definition of Family Member

The private foundation rules impose severe restrictions on the relationships which may exist between a foundation and its "disqualified persons," and violations of these restrictions trigger substantial penalty taxes. Under current law, "disqualified persons" with respect to a foundation include substantial contributors to the foundation and all of their lineal descendants, regardless of how many generations separate these descendants from the original contributor, or how distant their relationship may be from the foundation. This rule can impose a costly administrative burden on private foundations, the magnitude of which increases geometrically with each passing generation. Moreover, in those few cases in which more remote descendants continue to be actively involved in the operation of the foundation, they will still be treated as disqualified persons by virtue of being "foundation managers" (trustees or staff). To alleviate this problem, we strongly support the provision of S. 1857 that would limit the definition of "family member" to children and grandchildren of substantial contributors, and exclude more remote descendants.

Impediment: Automatic Imposition of First Level Penalty Taxes

To ensure compliance with the private foundation rules, Congress provided that foundations found in violation would be subject to a multi-level set of penalty taxes. While this sanction mechanism has been quite effective overall, the rules for application of the first level tax have proven to be unnecessarily rigid. Under current law the first level tax is imposed automatically even if the violation is inadvertent and is corrected within the statutory correction period. Because of the complexity of the private foundation rules and the inability of many foundations -- particularly smaller foundations -- to obtain sophisticated legal counsel, inadvertent violations of these rules do occasionally occur. The result is that foundation dollars that would otherwise be used for grants to charities must be used to pay the penalty tax. To prevent this diminution of foundations' grantmaking capacity, S. 1857 would give the Secretary of the Treasury authority to abate first level penalty taxes in cases where he determines that the violation of the private foundation rules was due to a good faith error or omission and was corrected within the statutory period. The House Ways and Means Committee has already approved similar abatement language as part of H.R. 4170 (Title III, Section 306).

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Progress in addressing the impediments we have identified here could result in subtantial improvement in the growth of private foundations and their resources. In addition, more dollars would be available for grantmaking purposes and not diverted to taxes or unnecessary tax-required administrative costs.

VIII. OBJECTION TO PROPOSED LIMIT ON GRANT ADMINISTRATION COSTS OF PRIVATE FOUNDATIONS

On October 6 the Ways and Means Committee approved a provision (Section 305 of H.R. 4170) which would seriously undermine the quality of foundation philanthropy by imposing a new restriction on foundations which rely on professional staffs to carry out their grant programs. Current law requires foundations to make annual qualifying distributions equal to at least 5 percent of the value of the foundation's investment assets. Under the proposed rule, a foundation's grant administration costs — including program staff salaries, consultants' fees, rent, travel expenses, and all other costs of administering a grant program — would not be treated as qualifying distributions to the extent that these costs exceed 15 percent of the foundation's grants determined on the basis of a five-year moving average.

This proposal's impact would be pervasive and detrimental. Many long-established and responsible foundations whose efficient and productive grant programs have been considered models for the foundation field commonly incur grant administration costs somewhat above the 15 percent limit. Decades of foundation experience confirm that these expenditures -- to select the most meritorious grant requests, to improve grant programs, to monitor grantee performance -- greatly enhance the public benefits that flow from the use of foundations' limited resources.

The principal effect of the proposed rule would be to discourage important and innovative grant programs which, by their very nature, require intensive foundation oversight. While a foundation making a few large grants to established institutions would be completely unaffected, the proposal would have a major impact on grant programs like the following:

> Seed-money Grants To Support New Charitable Endeavors: For example, a major foundation which has recently awarded grants to community groups in New York, Atlanta, and other cities to fund job development programs for single parents has also contracted with an outside consulting firm to conduct an intensive five-year analysis of the effects of the grant program. While the consultants' fees will exceed the proposed 15 percent limit, the knowledge gained from this detailed analysis should dramatically increase the effectiveness of future grant programs.
>
> Scholarship Programs: Foundations which conduct direct scholarship programs must devote substantial staff time to reviewing applications and monitoring students' performance. For company foundations the demands on staff time are particularly great since the foundation must conduct a detailed annual survey of all potential applicants to ensure compliance with IRS administrative requirements.
>
> Medical And Other Scientific Research: Foundations supporting medical or other scientific research must rely on M.D.s, Ph.D.s, and other highly qualified experts to administer their grant programs.

The proposed rule's substantial burden on foundation grantmaking should be imposed only after (1) a clear showing that additional regulation is required, and (2) a careful analysis of the impact of the proposed rule. In this case both are absent. The IRS has audited every foundation in the country since 1969. It has never suggested that grant administration costs are too high or that any additional regulation is needed. Treasury made no such legislative proposal in the House Oversight Subcommittee hearings this year.

The proposal is squarely inconsistent in two basic respects with Congress' past policy judgement on foundation grantmaking. First, whereas the 1969 law seeks to encourage foundations to take an active role in ensuring that their grant funds are used exclusively and effectively to accomplish charitable ends, the proposal would strongly discourage such foundation oversight. Second, while Congress has adjusted the annual payout requirement twice in recent years to avoid undermining foundations' future grantmaking capacity, the proposal would increase indirectly the annual distribution level for all foundations whose professional grantmaking and conscientious grant-monitoring bring them above the 15 percent level.

Students of philanthropy are unanimous in regarding the use of professional staffs as the major innovation giving rise to the modern foundation. It is the experience and expertise of professional program officers which has allowed foundations to evolve from passive sources of charitable funding to active, creative participants in the effort to meet public needs. Thus, by restricting foundations' use of professional staff, the proposed rule would create a major obstacle to effective foundation grantmaking. Therefore, we urge the Senate to reject this provision if it should become part of a House-Senate Conference on foundation legislation.

IX. CONCLUSIONS AND RECOMMENDATIONS

In summary, Mr. Chairman, we submit to you that the diversity of private foundations is one of our most valued attributes. Despite our diversity, we share in common support for significant charitable activities, a cherished tradition of independence, and an exciting potential to provide the venture capital for innovative ideas and changes in today's world and tomorrow's.

Although strictly regulated since 1969, private foundations have come to terms with these comprehensive legal restrictions and are basically supportive of the 1969 Act. However, certain aspects of this legal framework imposed unnecessary burdens on foundation philanthropy and its broad array of charitable beneficiaries. Those burdens should be removed.

S. 1857, the Durenberger-Moynihan bill, addresses five of these problems. First, and by far most important, this bill would stimulate increased giving to foundations and the creation of new foundations by eliminating the current tax disincentives for lifetime gifts to private foundations. As explained above, the bill also addresses four more technical defects of current law. We strongly urge the Committee to support this legislation.

STATEMENT OF THOMAS R. BUCKMAN, PRESIDENT, THE FOUNDATION CENTER, NEW YORK, NY

Mr. BUCKMAN. Mr. Chairman, I am Tom Buckman, president of the Foundation Center. The Foundation Center is a factfinding and analysis center for public users, and we have a 25-year reputation as the best source of information on private foundations in the United States. Each year we analyze all IRS foundation information returns, both on film and computer tape extracts. The detailed supporting evidence for our findings is in my prepared statement. Our analysis of aggregate data on private foundations shows: (1) no net growth in the numbers of active grantmaking foundations in the last 10 years; (2), a drop in the creation of new grantmaking foundations, and this is something that has been confirmed in a recent report by the GAO; (3), no growth in real aggregate assets in constant dollars over 10 years; (4) a decline in the average amount of new money added to endowment by each foundation in terms of constant dollars. I have examined Mr. Bothwell's testimony for this hearing today, and I know that he questions some of our findings. I can only say that we have the data. It is publicly available, and our analyses can be verified by any independent outside investigator. We do not see growth in this field. And as a result, active grant making foundations are giving barely more today in constant dollars than they did 10 years ago. But today, there is a greater need than ever before for private funding in our growing society. To meet the need, foundations must increase their giving power. We hope for provisions in Senate bill 1857 which will help them to do that. Mr. Chairman, I want to point out that in our analyses we exclude burned-out public charities. They are defined by law as private foundations but have no other resemblance to active grantmaking foundations. They were not intended to function as foundations, but to serve other charitable purposes.

In my view, burned out public charities should not be considered in any data profile used for legislation designed to improve the functioning of the active grantmaking foundations. These are our major conclusions. Thank you, Mr. Chairman, for this opportunity to testify.

Senator DURENBERGER. Thank you very much. Mrs. Freeman, it is a pleasure to have you with us.

[The prepared statement follows:]

Statement of Thomas R. Buckman
President, The Foundation Center

Testimony Prepared for U.S. Senate Committee on Finance
Subcommittee on Taxation and Debt Management

Hon. Robert Packwood, Chairman

Hearing: February 24, 1984

MR. CHAIRMAN: My name is Thomas R. Buckman. I am President of The Foundation Center, a national clearinghouse dedicated to providing the public with information on private foundations and their grantmaking programs.

The Center, headquartered in New York, is a modern information analysis agency with a professional staff of information and editorial specialists. Over the last 25 years, the Center has established a reputation as the source of the most current and complete information on private grantmaking foundations. Every year we purchase from the IRS microfilmed copies of all the private foundation information returns filed (Form 990-PF), as well as a computerized extract containing private foundation data from the IRS Master File. This data on computer tapes is verified against copies of the filmed returns filed, and made available to the public through our free library network and our publications. The Center uses up-to-date computer technologies, and for ten years has been a leader in providing foundation information over computer networks to any point in the United States.

Number of Active Grantmaking Private Foundations

Mr. Chairman, as the Committee considers the regulation and operation of private foundations, it is important that it have as clear an understanding as possible of the total number of foundations and the rate at which new foundations are being created. Confusion surrounding this point can, I believe, be dispelled by a careful look at the available data. IRS data show that the total number of organizations filing annual private foundation returns has increased steadily in recent years and now totals about 27,000. However, it is important to recognize that this total includes not only active grantmaking and operating foundations, but also a substantial and growing number of "burned-out" public charities. These are organizations which were intended to operate as publicly-supported charities, but which have failed to attract the required public support and have, therefore, been classified under the technical tax law definition as private foundations. The important point here is that these organizations were not intended to, and never will, fulfill the philanthropic function commonly ascribed to private foundations. Our best estimate is that the IRS data include almost 4,000 such organizations. Moreover, the number is continually increasing; every two weeks the Internal Revenue Bulletin contains a new list of burned-out public charities which have been reclassified as private foundations.

While these burned-out public charities are appropriately subject to the self-dealing rules and other regulatory restrictions applicable to private foundations, it is important to exclude these organizations in assessing the health of the foundation community and, particularly, in evaluating changes in the foundation "birth rate."

Because The Foundation Center's data do exclude these burned-out public charities, I believe they provide the most accurate gauge of changes in the foundation birth rate.[1]

The Foundation Center's figures over the past several years show very slow growth in the number of active grantmaking foundations. Our figures are carefully compiled each year from a detailed examination of the private foundation extract from the Master File, which we acquire from the Internal Revenue Service. As stated earlier, Center staff verify the figures against filmed copies of the actual returns filed to ensure keyboarding accuracy.

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[1] Because our database is used primarily by grantseekers, we also exclude operating foundations which make no grants. While this means that our total understates the number of active private operating and nonoperating foundations—probably by about 900—this exclusion does not affect the validity of our data on the foundation birth rate since the number of operating foundations appears to be increasing quite slowly.

The resulting figures are published in the introductions to our National Data Book together with a brief profile of every active grantmaking foundation which we have found on the tape extract received from the Internal Revenue Service.

Here from the latest, 7th Edition, are the numbers resulting from our analysis, including the criteria for excluding non-grantmaking foundations:

> The *National Data Book* is the most comprehensive listing of currently active grantmaking foundations in the United States. The Seventh Edition contains entries for 21,906 private foundations and 182 community foundations which awarded grants of $1 or more during the reporting year. The foundations included in this volume hold combined assets of $48.2 billion and awarded $3.4 billion in grants during the year. Eighty-four percent of this universe (18,631 foundations) awarded less than $100,000 each in grants during the year, accounting for 9.8 percent of all foundation giving. For many of these smaller foundations, the *National Data Book* is the only published source of information.
>
> The entries for this publication are derived from the Internal Revenue Service's computer files of the information returns (Forms 990-AR and 990-PF) filed in 1979, 1980, and early 1981 by organizations classified as private foundations by the IRS. To ensure keyboarding accuracy, Foundation Center staff has verified approximately 75 percent of the listings against copies of the original information returns filed with the IRS. The Center also gathers and adds to the database information on community foundations who do not submit the same information returns as private foundations and therefore are not included in the primary IRS listing.
>
> The complete national file of private foundations contains records for 27,264 organizations. Of this group, 682 organizations do not appear in this publication because current data was not available on the IRS tape or the foundation had terminated. An additional 4,[illegible]94 organizations are not listed because they did not award any grants in the year of record. Although the Center does attempt to verify the accuracy of IRS keyboarding on specific data elements, we do not attempt to verify whether all known private foundations are listed on the IRS tape. The Center also does not update fiscal data for any foundation since this file represents the assets and grantmaking activities of foundations during a specific IRS year of record.

This book has been published since 1972. Here following are the figures for the successive years:

(continued)

Source	Number of Active Grantmaking Foundations	Total Combined Assets (in billions)	Total Grants (in billions)
National Data Book, 1972 (1st Edition)	"approx. 25,000"	N/A	N/A
National Data Book, 1974-1976 (2nd Edition)	21,877	$30.1	$1.9
National Data Book, 3rd Edition (1975-1977)	21,447	34.8	2.2
National Data Book, 4th Edition (1979)	22,152	35.3	2.3
National Data Book, 5th Edition (1980)	22,484	37.2	2.5
National Data Book, 6th Edition (1982)	22,535	41.6	2.8
National Data Book, 7th Edition (1983)	21,906	48.2	3.4

As the preceding chart indicates, there has been no net increase in the number of active grantmaking foundations in recent years. This fact reflects both the termination of numerous existing grantmaking foundations since 1969, and a dramatic drop in the creation of new grantmaking foundations. Data recently released by the General Accounting Office confirm this decline,[1] showing a 59% drop in the creation of new grantmaking foundations between the 1960s and the 1970s.

Effects of Inflation

In The Foundation Directory, 9th Edition (published September 1983), which includes 4,063 of the largest foundations, we have noted the effects of inflation on foundation dollars. These 4,063 foundations account for about 93 percent of all assets of active grantmaking foundations, but the real value of these assets in constant dollars has weakened.

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[1] Statistical Analysis of The Operation and Activities of Private Foundations, General Accounting Office (January 5, 1984), 26-29.

We report in the new Directory as follows:

> Foundation assets continue to decline in real value as the number of foundations with portfolios above $1 million and annual giving above $100,000 increases. (See Figure C following text) in 1981 the current dollar value of assets of qualifying foundations was $47.3 billion, but in constant dollars only $17.4 billion, or about 30 percent less than the constant dollar value in 1972. This occurred despite a 62 percent increase in the number of qualifying foundations from 2,533 in 1972 to 4,063 in 1981.
>
> The number of Foundations qualifying for inclusion in the Directory has grown steadily since 1972, although the total number of active, grantmaking private foundations has remained fairly constant during the same period. This increase can be attributed to four factors: 1) improved access to information about foundation entities; 2) foundations established since 1972, and foundations established earlier which received substantial additions to endowment in the 1970s; 3) market conditions resulting in appreciated assets in current dollars which are sharply depreciated when converted to constant dollars; and 4) the growth in the number of foundations qualifying for inclusion by total giving ($100,000 or more), but which hold assets of less than $1 million. This last factor would appear to be due to market conditions which resulted in inflated current dollar values of total giving, and increased giving as a percentage of assets under foundation payout requirements prior to ERTA 1981.
>
> Average gifts received in constant dollars (i.e., 1967 dollars) for each of 2,533 foundations in 1972 amounted to about $232,000; in 1982, only $157,343 in constant dollars. The average grant payout in constant dollars per year for each foundation ($488,000 in 1972; $314,000 in 1981) has declined 35.6 percent.
>
> To be effective supporters of organizations in the nonprofit voluntary sector, foundations must maintain their giving power. Inflation, government regulation of minimum annual payout, and limitation of deductibility when new gifts to endowments are made all tend to decrease the ability of foundations to give today and still add to their assets and their grantmaking capability in the future. Inflation makes the greatest inroads, but regulation as an added factor creates a hardship, especially for independent foundations, the largest group surveyed: at the same time that inflation impairs the real value of assets and grants; independent foundations cannot attract a sufficient number of new dollars for endowment to counterbalance the loss. Payout requirements may leave little

> opportunity for greater investment, although this has been alleviated somewhat by the new payout requirement in ERTA, 1981. Still, regulation inhibits growth and discourages formation of new independent foundations.

Thank you, Mr. Chairman, for the opportunity to file this statement as part of the record of your hearings on private foundations.

2.24.84

TABLE 8. AGGREGATE FOUNDATION FISCAL DATA ADJUSTED FOR INFLATION 1972—1981

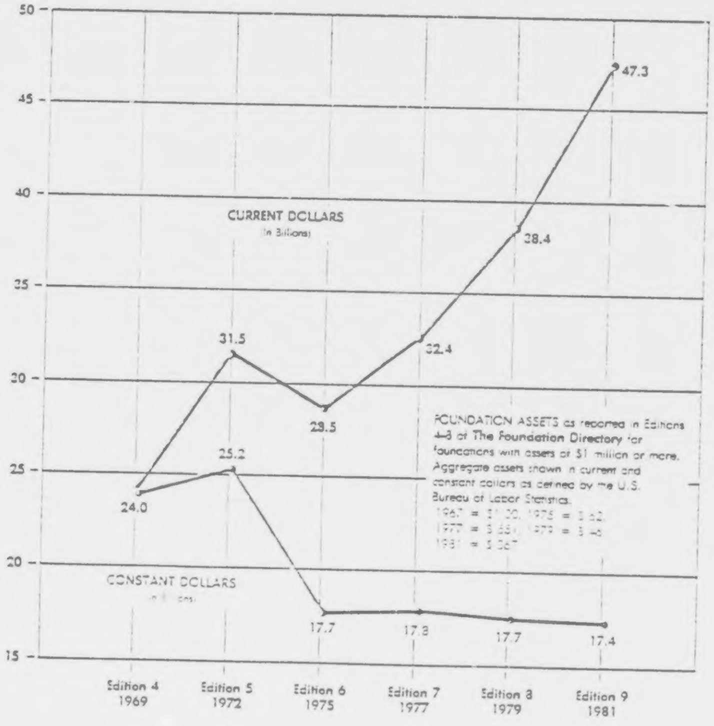
Constant Dollars based on 1967 = $1.00; 1972 = $.799; 1975 = $.62; 1977 = $.551; 1979 = $.46; 1981 = $.367

All dollar figures expressed in thousands

Year of Data	No. of Foundations	Assets	Percent Increase (Decrease)	Gifts Received	Percent Increase (Decrease)	Total Giving	Percent Increase (Decrease)
1972*	2,533	$31,509,711 25,176,259		$ 733,802 586,308		$1,548,193 1,237,006	
1975*	2,818	28,635,039 17,753,910	(9.1%) (29.5%)	945,726 586,350	28.9% 0.0%	1,807,736 1,120,796	16.8% (9.4%)
1977*	3,138	32,358,973 17,829,794	2.7% (29.2%)	1,338,723 737,636	82.4% 25.8%	2,061,784 1,136,043	33.2% (8.2%)
1979*	3,363	38,553,328 17,734,500	22.4% (29.6%)	1,355,649 623,599	84.7% 6.4%	2,483,200 1,142,272	60.4% (7.7%)
1981*	4,063	47,541,276 17,447,648	50.9% (30.7%)	1,741,920 639,285	137.4% 9.0%	3,479,900 1,277,123	124.8% 3.2%

*Data drawn respectively from Editions 5, 6, 7, 8, and 9 of *The Foundation Directory*.

FIGURE C. THE EFFECT OF INFLATION ON FOUNDATION ASSETS 1969—1981



FOUNDATION ASSETS as reported in Editions 4–8 of The Foundation Directory for foundations with assets of $1 million or more. Aggregate assets shown in current and constant dollars as defined by the U.S. Bureau of Labor Statistics.
1967 = $1.00, 1975 = $.62,
1977 = $.551, 1979 = $.46
1981 = $.367

STATEMENT OF MRS. ORVILLE L. FREEMAN, NATIONAL PRESIDENT, GIRL SCOUTS OF AMERICA, WASHINGTON, DC

Mrs. **Freeman**. Thank you, Mr. Chairman, and members of the subcommittee. I am Jane Freeman, the national president Girl Scouts of the U.S.A. I am delighted to have this opportunity to join my colleagues today on behalf of four organizations of the nonprofit sector. With me are Mr. Brian O'Connell, president of the Independent Sector, Mr. Jack Moskowitz, the senior vice president of government relations for the United Way of America, and Mr. Christ Mould general counsel of the YMCA of the U.S.A. had planned to be here and has asked me to tell the subcommittee that the YMCA is strongly supportive and has also submitted written testimony.

Now, our organizations serve a diverse cross section of this Nation's citizens from the rural and urban areas, from all income levels and all ages, from all ethnic, racial, religious, economic, and social backgrounds. Our organizations represent valuable private resources that can be tapped in cooperative ventures with foundations and with the Federal and community leadership. We work together to avoid duplication of services and to develop ways of serving many millions of people. The national volunteer organizations represented here strongly support the proposed amendment of the law to remove certain impediments to the effective philanthropy of private foundations. In addition, written testimony has also been submitted by the following: Father Theodore Hesberg, president of Notre Dame; Gov. Terry Sanford, president, Duke University; Dr. Harold Shapiro, president, the University of Michigan. My formal statement has also been submitted for the record.

Now, the Girl Scouts of the U.S.A., the largest organization serving girls and women in the world, the primary funding of our national services to almost 3 million members comes from two major sources—the modest annual dues of our members, and income generated through the sales of official Girl Scouts publications, uniforms, and equipment. A small group of private foundations make regular contributions to Girl Scouts, U.S.A. in response to an annual appeal letter. The Girl Scouts of the U.S.A. receives no United Way campaign funds. Our 355 local Girl Scout councils, which are responsible for their own organizations, do benefit from United Way. So, we need very much to have the kind of money that you get from a private foundation operating in the public interest to help us do a more diversified outreach, to do the new and innovative things that we cannot do, that kind of venture capital which private industry would have.

We do not have that from our regular income sources, and we need that if we are going to be able to reach out to do such things as the special training of our leaders to reach out to minority people—a grant that we had from a foundation recently—we had a large grant from the Max Fleishmann Foundation several years ago that allowed us to develop a training center to train adult leaders. We have an upcoming conference on service to the American Indian communities, which has been made possible by a grant from a foundation. In all of our 72-year history, we have only been able to continue to do these innovative things with special foundation grants. The views I am expressing here today are widely held in the philanthropic community, and among volunteer organizations. Thank you, Mr. Chairman.

Senator DURENBERGER. Thank you very much. Brian or Jack, do you have statements to be made part of the record.

[The prepared statement follows:]

TESTIMONY OF MRS. ORVILLE L. FREEMAN, NATIONAL PRESIDENT, GIRL SCOUTS OF THE UNITED STATES OF AMERICA

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE, I AM JANE FREEMAN, NATIONAL PRESIDENT OF GIRL SCOUTS OF THE U.S.A. I AM PLEASED TO HAVE THIS OPPORTUNITY TO JOIN MY COLLEAGUES TODAY ON BEHALF OF FOUR ORGANIZATIONS OF THE NON-PROFIT SECTOR. WITH ME ARE:

BRIAN O'CONNELL, PRESIDENT OF INDEPENDENT SECTOR

JACK MOSKOWITZ, SENIOR VICE-PRESIDENT, GOVERNMENT RELATIONS OF UNITED WAY OF AMERICA

CHRIS MOULD, GENERAL COUNSEL, YMCA OF THE U.S.A. HAD PLANNED TO BE HERE BUT HAS ASKED ME TO TELL THE SUBCOMMITTEE THAT THE YMCA IS STRONGLY SUPPORTIVE AND HAS ALSO SUBMITTED WRITTEN TESTIMONY. OUR ORGANIZATIONS SERVE A DIVERSE CROSS SECTION OF THIS NATION'S CITIZENS FROM RURAL AND URBAN AREAS, FROM ALL INCOME LEVELS, ALL AGES, AND FROM ALL ETHNIC, RACIAL, RELIGIOUS, ECONOMIC AND SOCIAL BACKGROUNDS. OUR ORGANIZATIONS

REPRESENT VALUABLE PRIVATE RESOURCES THAT CAN BE TAPPED IN COOPERATIVE VENTURES WITH FOUNDATIONS AND WITH FEDERAL AND COMMUNITY LEADERSHIP. WE WORK TOGETHER TO AVOID DUPLICATION OF SERVICES AND TO DEVELOP WAYS OF SERVING MANY MILLIONS OF PEOPLE.

THE NATIONAL VOLUNTARY AGENCIES REPRESENTED HERE STRONGLY SUPPORT THE PROPOSED AMENDMENT OF THE LAW TO REMOVE CERTAIN IMPEDIMENTS TO THE EFFECTIVE PHILANTHROPY OF PRIVATE FOUNDATIONS. IN ADDITION WRITTEN TESTIMONY HAS ALSO BEEN SUBMITTED BY THE FOLLOWING:

FATHER THEODORE M. HESSBERG, PRESIDENT, NOTRE DAME
GOVERNOR TERRY SANFORD, PRESIDENT, DUKE UNIVERSITY
DR. HAROLD SHAPIRO, PRESIDENT, UNIVERSITY OF MICHIGAN

MY FORMAL STATEMENT HAS ALSO BEEN SUBMITTED FOR THE RECORD.

FOR GIRL SCOUTS OF THE U.S.A., THE LARGEST ORGANIZATION SERVING GIRLS AND WOMEN IN THE WORLD, THE PRIMARY FUNDING OF OUR NATIONAL SERVICES TO ALMOST THREE MILLION MEMBERS COMES FROM TWO MAJOR SOURCES: THE MODEST ANNUAL DUES OF OUR MEMBERS, AND INCOME GENERATED THROUGH SALES OF OFFICIAL GIRL SCOUT PUBLICATIONS, UNIFORMS AND EQUIPMENT. A SMALL GROUP OF PRIVATE FOUNDATIONS MAKE REGULAR CONTRIBUTIONS TO GIRL SCOUTS OF THE U.S.A. IN RESPONSE TO AN ANNUAL APPEAL LETTER.

GIRL SCOUTS OF THE U.S.A. RECEIVES NO UNITED WAY CAMPAIGN FUNDS. OUR 335 LOCAL GIRL SCOUT COUNCILS, WHICH ARE RESPONSIBLE FOR THEIR OWN OPERATIONS, DO BENEFIT FROM UNITED WAY ALLOCATIONS WHICH, TOGETHER WITH PROFITS FROM THEIR COOKIE SALES AND DONATIONS BY PARENTS AND INDIVIDUALS, HELP PROVIDE ESSENTIAL SERVICES LOCALLY.

AT THE NATIONAL LEVEL, GIRL SCOUTING, TRADITIONALLY, HAS TURNED TO THE PHILANTHROPIC COMMUNITY TO SECURE FUNDS FOR SPECIAL PROJECTS THAT ARE BEYOND THE RESOURCES OF OUR ANNUAL OPERATING BUDGET.

NO NATIONAL MOVEMENT SUCH AS THESE ORGANIZATIONS REPRESENTED TODAY CAN PROGRESS WITHOUT TAKING RISKS TO MEET, OR ANTICIPATE, NEEDS-- WITHOUT TESTING THE CHANGING ENVIRONMENT IN WHICH THEY FUNCTION.

MANY PRIVATE FOUNDATIONS, OPERATING IN THE PUBLIC INTEREST, HAVE EFFECTIVELY ALLIED THEMSELVES WITH GIRL SCOUTS OF THE U.S.A. IN OUR EFFORTS TO REACH A MORE DIVERSIFIED MEMBERSHIP AMONG URBAN AND RURAL MINORITIES, TO DEVELOP OUR NATIONAL PROGRAM AND TRAINING CENTERS AND THEIR SERVICES, AND TO TEST NEW PROGRAM AND LEADERSHIP TRAINING CONCEPTS.

THIS ADDITIONAL SUPPORT PROVIDES THE NATIONAL GIRL SCOUT MOVEMENT WITH WHAT THE FINANCIAL COMMUNITY MIGHT TERM "VENTURE CAPITAL." OVER THE YEARS, IT HAS MADE IT POSSIBLE FOR US TO UNDERTAKE A WHOLE SPECTRUM OF DEMONSTRATION OR EXPERIMENTAL PROJECTS, AS WE HAVE SOUGHT WAYS TO RESPOND TO THE GROWING AND CHANGING INTERESTS OF OUR YOUNG CONSTITUENCY. FOR EXAMPLE:

A GENEROUS GIFT OF $2 MILLION FROM THE MAX C. FLEISCHMANN FOUNDATION PROVIDED NEEDED SEED MONEY TO ATTRACT OTHER CONTRIBUTIONS AND VOLUNTEER ASSISTANCE FOR OUR SUCCESSFUL $10 MILLION FUND RAISING CAMPAIGN TO BUILD A NEW NATIONAL GIRL SCOUT TRAINING CENTER WHERE WE TRAIN THE ADULTS AND OLDER GIRLS WHO GIVE LEADERSHIP FOR OUR MEMBERS ACROSS THE COUNTRY.

A RECENT AND HIGHLY SUCCESSFUL EVENT AT OUR CENTER ON THE CONTRIBUTIONS OF MINORITY WOMEN WAS MADE POSSIBLE BY A GRANT FROM A FOUNDATION.

HALF OF THE REQUIRED FUNDING FOR AN UPCOMING CONFERENCE ON SERVICE TO AMERICAN INDIAN COMMUNITIES CAME FROM A FOUNDATION.

DURING THE COURSE OF OUR 72-YEAR HISTORY, GIRL SCOUTS HAVE BEEN ABLE TO MAKE A DIFFERENCE IN THE LIVES OF MILLIONS OF GIRLS BY THE USE OF FOUNDATION FUNDS FOR PROGRAMS WHICH WERE NEEDED, WERE INNOVATIVE AND FAR REACHING. THE NEED FOR THESE PROJECTS WILL NOT CEASE. AND, IF THE EFFECTIVENESS OF FOUNDATIONS IS ERODED BY THE LACK OF AN INCENTIVE TO DONORS IN THE FORM OF A DEDUCTION FOR CONTRIBUTIONS ON THE SAME BASIS AS GIFTS TO OTHER CHARITIES, THE LONG-TERM PROSPECT OF FOUNDATION HELP FOR THESE PROJECTS APPEARS TO BE DIM UNDER THE PRESENT LAW.

THE VIEWS THAT WE ARE EXPRESSING HERE ARE WIDELY HELD IN THE PHILANTHROPIC COMMUNITY.

TESTIMONY SUBMITTED TO
SUBCOMMITTEE ON TAXATION AND DEBT MANAGEMENT
SENATE COMMITTEE ON FINANCE

FEBRUARY 24, 1984

YMCA of the USA
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The YMCA of the USA is pleased to support the elimination of tax disincentives for gifts to foundations as proposed in S. 1857. We believe the income tax deduction rules for gifts to private foundations should be the same as gifts to other charities. This change will make more foundation money available to charitable organizations such as the YMCA.

Although we do not claim to be experts on laws governing foundations, YMCAs throughout the country have been the frequent beneficiaries of foundation support. Over the past ten years, the national YMCA and individual YMCAs have received over 1,800 grants from the top 400 foundations in the country.[1] As no foundation grant in the print-out is for less than $5,000, we are talking about many millions over that period.

At a time when government funding sources are being curtailed at all three levels (federal, state, and local), charitable organizations must increasingly turn to foundations for support -- especially for innovative programs. Before we describe a handful of examples among the literally thousands of foundation grants YMCAs have received, there are some important points to be made regarding foundation funding in general, in the YMCA experience:

1. Usually such funding provides the flexibility to a YMCA not available through other sources of income such as standard membership and program fees, to say nothing of government grants. If the initial program approach proves less effective than expected, often changes can be made without submission of multiple copies of amended proposals. Risks can be taken that can lead to innovative programs that otherwise would not be possible through other traditional sources of income.

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[1] Foundation Grants Index computer printout, 1973 to April 1983.

Harold Davis
President, National Council

L. Stanton Williams
Chairman, National Board

Solon B. Cousins
National Executive Director

2. Funding from one foundation often generates funding from other sources including other foundations in following years.

3. Foundation funding can lead to collaborative program efforts that maximize the now critically stretched resources of a variety of not-for-profit and governmental agencies. In turn, creativity is generated, unnecessary duplication is avoided, and volunteers are often sought out and utilized in more substantive ways than ever before.

We would like to share with you some successful programs started by foundation grants in three YMCAs: the Harlem and the Uptown Branches of the Greater New York YMCA and the Austin, Texas, YMCA.

1. Since 1980, the Ford Foundation has given $450,000 to a program administered by the Harlem YMCA addressing the needs of pregnant teenagers from the age of 11 through 17 as well as of their families. Project Redirection has also received $70,000 more from the New York Community Trust, the Helena Rubenstein Foundation, and the J. C. Penney Foundation. This program has been so successful that it has become a national model for similar efforts throughout the United States and has been presented as such at many forums -- most recently the Urban League here in Washington, DC. The kinds of services made available to the several hundred young women/children and their families have included:

    A. teaching parenting skills;

    B. encouraging prospective mothers to continue or return to school;

    C. promoting good health care and nutritional information;

    D. employment and training skills to enable those who will be single heads of households to support their children, along with an array of counseling services and programs from dozens of community agencies often previously unknown to these clients.

    The use of volunteer mentors, called "community women," in this program contributes enormously to the success. These women are residents of the Harlem community and perform an informal advocate role for the young mother and her family. They are on call seven days a week and perform a variety of functions including accompanying the client to the hospital when delivery is near, helping her register at school, or preparing for a job interview. This total community effort has brought together agencies and services that never before related to each other in many cases, much less made an effort to provide the total array of services needed by this particular target population.

2. Support from the Louis Calder, Barker Welfare, Charles Frueauff, and J. C. Penney Foundations, along with $18,000 in New York City Youth Board summer recreation funds, has enabled the Uptown Branch YMCA to survive. No other agency in the Uptown community on the Upper West Side of Manhattan between 95th and 110th Streets serves the general needs of young people. Without foundation support, the annual deficit incurred at this branch of $100,000 would doubtless require closing down the after-school program and the teen program provided. The after-school program provides comprehensive care for children ages 5 to 12 from 3 to 6:30 p.m. Educational and recreational activities are carefully designed to forestall feelings of isolation and powerlessness by developing social and intellectual skills and emotional support for dealing more effectively with their home, school, and neighborhood influences. For children over 12, the teen program designed by the Uptown Branch helps these young people acquire leadership and communication skills which begin to promote confidence and the belief they can make decisions which will alter the course of their lives. The Uptown Y teen program also benefits from the fortunate circumstance that a cohesive community-based network of 42 youth-related services exists in the neighborhood. The "West Side Task Force for Youth" enables Y staff to refer youth with special needs to the appropriate agencies and to receive referrals from these agencies.

3. The Austin, Texas, YMCA received a seed grant from the Lola Wright Foundation of $22,000 to coordinate badly needed recreational activities to provide disabled, health-impaired youth and adults with well-developed fitness programs that will result in the development of:

   A. physical and motor skills necessary for daily living activities;

   B. a more positive self-image and feeling of self-worth;

   C. more confidence to enable many participants to move into mainstream YMCA programs, which whenever possible is the most desirable approach to this special population.

   This grant has demonstrated the YMCA's ability to serve as a facilitator by:

   A. exchanging YMCA staff time for swimming facilities presently unavailable at the YMCA;

   B. drawing from an established volunteer pool and recruiting other volunteers who then become familiar with this special population;

   C. coordinating service programs with a variety of agencies resulting in savings in operating equipment and capital expenditures;

   D. collaborating among agencies (which was previously almost non-existent).

In addition, certain needs of the disabled clients have been met by:

A. providing group recreational activities that reduce the clients' sense of isolation (which often leads to a negative self-image and depression);

B. better public acceptance through direct contact with volunteers who have never worked with or been exposed to this special population before and subsequently experience attitudinal changes;

C. by providing opportunities for special education and other kinds of students to work with this population as interns, better teachers and specialists will later be available to work with this group.

There are many hundreds of examples we could have provided on the value of foundation support; we believe the above-described programs indicate the broad spectrum of foundation support to YMCAs and how important they have been. We thank you for your consideration.

STATEMENT OF BRIAN O'CONNELL, PRESIDENT, INDEPENDENT SECTOR, WASHINGTON, DC

Mr. O'CONNELL. Thank you, Mr. Chairman. I do want to indicate that, in support of Jane Freeman's testimony, that Independent Sector—which as you know represents 550 very diverse organizations—has taken a very careful and initially somewhat skeptical look at the legislation. We are obsolutely certain that it will serve the voluntary organizations as well as the philanthropic. We are satisfied that it indeed serves the total sector. There are only four sources of funds for this vibrant sector—individuals, foundations, corporations, and earned income. Foundations, as Tom has indicated, are declining as a source. If we believe very strongly in strengthening this side of American life, we must strengthen the sources of income which very much include foundations. I am for the reporting requirements, but I believe that once a foundation is willing to accept its responsibilities as a public organization, it should be encouraged in the maximum freedom, and I believe that your legislation goes a long way in that appropriate direction. Thank you for it.

Senator DURENBERGER. Thank you. Jack.

[The prepared statement follows:]

TESTIMONY of BRIAN O'CONNELL

President

INDEPENDENT SECTOR

My name is Brian O'Connell, president of INDEPENDENT SECTOR, a membership organization of 545 national voluntary organizations, foundations and corporations which have banded together to strengthen our national traditions of giving, volunteering and not-for-profit initiative.

Our Voting Members are organizations with national interests and impact in philanthropy, voluntary action and other activities related to the independent pursuit of the educational, scientific, health, welfare, cultural and religious life of the nation. The range of members includes National Council of Churches, United Negro College Fund, American Association of Museums, Boys' Clubs of America, American Enterprise Institute, Brookings Institution, Catholic Charities, Audubon Society, Goodwill Industries, American Association of Retired Persons, Opera America, National Urban League, Council for the Advancement and Support of Education, American Association of University Women, YM & YWCA's, B'nai B'rith, Native American Rights Fund, American Cancer Society, U.S. Committee for UNICEF, Organization of Chinese Americans, National Puerto Rican Coalition and 525 other equally diverse organizations. The common denominator among this vast mix is their shared determination that the voluntary and philanthropic impulses shall remain a vibaant part of America.

I served previously as Executive Director of the Coalition of National Voluntary Organizations and was for twelve years Executive Director of the National Mental Health Association. From all these vantage points, I have had full opportunity to learn about the work of foundations and their place in our society.

A summary of my view of foundations in the American society is as follows:

1. Pluralism and citizen participation are among the greatest strengths of America. They spawn the organizations that give the country and its people options and alternatives and vehicles for service, experimentation, creativity, criticism and reform.
2. To have such pluralism and diversity, voluntary organizations must have every opportunity to be independent.
3. Independence requires multiple sources of potential funding.
4. There are only four sources of independent funding --
   a. individuals
   b. corporations
   c. earned income, such as tuition or ticket sales
   d. foundations
5. If in fact we are to have vibrant independent organizations, we have to encourage maximum development of all four sources of funds including foundations.
6. Encouragement of pluralism, diversity and maximum citizen participation require the greatest freedom of action for both donee and donor organizations.
7. Protection from abuse of that independence is best achieved by a requirement of regular and full disclosure of the makeup, finances and activities of all such organizations.
8. Overwhelmingly, almost all foundations are serving the public good.

In sum, for all of the above reasons, INDEPENDENT SECTOR supports S. 1857. This legislation will result in the birth of a significant number of new foundations. Section 1 would make the incentive for financial gifts to foundations equal with that accorded public charities. As a result, donors will give increased consideration to gifts to foundations. This change is in the long-term best interest of public charities because of the increased number and size of foundations.

There is another major benefit which results from the increased number of new foundations and deserves special note. Foundations have the unique ability to quickly respond to changing needs. More foundations, and quite simply, more grant monies will help nurture the very pluralism on which this society depends. One does not have to go back over the 300 years of our history to find examples of the importance of independent and often unpredictable citizen action. Just in the past 15 years, citizen service and influence have had profound impact on a staggering array of public issues, including: the rights of women, conservation and preservation, education on our free enterprise system, learning disabilities, refugees, Hispanic culture and rights, the aged, mental health, native Americans, the dying, experimental theatre, international understanding, population control, neighborhood empowerment, and on and on.

All of these great efforts have benefited from foundation support to achieve their levels of influence.

This legislation is also particularly timely. At this time in the nation's history, with reduced federal resources for the services of non-profits and the increased demand for their services, finding new sources of funding is essential. Newly emerging issues and concerns will need start-up funds and traditional services will need new support sources. S. 1857 will supply new dollars for both.

In Section 2 of S. 1857, provision is made for several technical changes which reduce the administrative costs of foundations. One of these changes relates to the requirement that foundations exercise "expenditure responsibility" for grants to organizations that have not yet acquired tax exempt status. Expenditure responsiblity involves added administrative activity for the foundation in the form of pre-grant inquiries, formal agreements, periodic reports, reporting on tax forms, etc. For foundations with limited or no staff, such grants are simply ruled out. S. 1857 would exempt grants of under $25,000 from this requirement, thus freeing up time and dollars to support the activities of newly formed public charities.

We urgently request this Committee to add S. 1857 to any tax legislation it passes this year.

In conclusion, I have probably had as much opportunity as anyone to observe the foundation world and to be frustrated by its diversity and some of its limitations. Through it all, I am extremely positive about the role that foundations play in contributing to our appropriate and indeed necessary diversity and pluralism. As long as such institutions are willing to disclose fully their makeup, finances and activities, I encourage the maximum possible expansion of their numbers, grantmaking size and independence. S. 1857 will contribute significantly to this goal.

STATEMENT OF JACK MOSKOWITZ, SENIOR VICE PRESIDENT, FEDERAL GOVERNMENT RELATIONS, UNITED WAY OF AMERICA, ALEXANDRIA, VA

Mr. MOSKOWITZ. I have a statement to submit for the record.

Senator DURENBERGER. We will make it part of the record.

Mr. MOSKOWITZ. I would just like to make three points. One, United Way of America supports your and Senator Moynihan's bill because they are concerned about the decline in the number of new foundations. Two, the board also feels that the funding of public charities will not be adversely affected by elimination of these discriminatory tax rules for private foundations. And three, though foundation support of United Ways is only about 2 percent of the $1.95 billion raised, this support is important because it is a source of funds for innovative programs. One example is a grant by the Piton Foundation of Colorado to stimulate local United Ways to provide venture grants to new and nontraditional agencies for imaginative programs. These venture grants are funding a service to provide shelter and counseling for battered spouses in Texas and a New Jersey program to develop student assistance services for alcoholism and drug abuse by youngsters. Those are examples of the kind of innovative things that can be funded from foundation grants. Thank you very much, Mr. Chairman.

Senator DURENBERGER. Thank you all very much.

[The prepared statement follows:]

STATEMENT OF
JACK MOSKOWITZ
SENIOR VICE PRESIDENT
FEDERAL GOVERNMENT RELATIONS, UNITED WAY OF AMERICA
BEFORE THE
SUBCOMMITTEE ON TAXATION AND DEBT MANAGEMENT
OF THE
SENATE FINANCE COMMITTEE

February 24, 1984

United Way of America supports the Durenberger/Moynihan bill [S.1857] removing impediments to effective philanthropy by foundations. The United Way of America Board of Governors voted unanimously to endorse this legislation. They felt that enactment would prevent the continuing drop in giving to foundations because of the less favorable treatment presently for lifetime gifts to private foundations. The bill eliminates major tax disincentives for gifts to foundations. Most important, current law allows only a part of the value of appreciated property given to a foundation to be deducted while the full value is deductible if the same property is given to a public charity. S.1857 will also remove serious practical obstacles to foundation operations without in any way diminishing effective regulation of private foundation activities.

United Way of America Board of Governors believes that these modifications are necessary to deal squarely with the dramatic decline in the creation of new foundations and the infusion of new funds into existing foundations since 1969. The Board also feels that the funding of public charities will not be adversely affected by elimination of these discriminatory tax rules.

Some of the income of United Ways (we estimate about 2% of the total) comes from private foundations. Although this amount is not large in comparison to over 1.95 billion raised by local United Ways last year, this foundation support is important. It is the source of funds for innovative programs that very often cannot and should not be funded from moneys raised to provide for human care services. For example, United Way of America is administering a grant by the Piton Foundation of Colorado to stimulate local United Ways to provide venture grants to new and non-traditional agencies for imaginative programs. For example, these venture grants are funding a service to provide shelter and counseling for battered spouses in Texas and a New Jersey program to develop student assistance services for alcoholism and drug abuse by youngsters. The venture grant program is now in its third year. The number of cities participating jumped from 13 in 1981-82 to 31 in 1983-84. United Way of America also is administering a $630,000 Kellogg Foundation grant to train volunteers from local United Ways, non-United Way agencies and emerging organizations on volunteer board functions. Our training center, the National Academy for Voluntarism, in consultation with a Hispanic Advisory Committee is implementing a Hispanic Leadership Development Program. This three-year pilot project is funded from grants from the W. K. Kellogg Foundation, the American Express Foundation, Coca Cola Corporation and Levi Strauss.

Mandatory payout provisions for private foundations for charitable purposes make it inevitable that an increase in the number of foundations will mean an increase in the kinds of programs described above. It is clear that stimulating a steady, healthy growth of new foundations is essential to continue the search for better ways to provide human care services. Adoption of the Durenberger/Moynihan bill is sure to encourage the birth of new foundations and consequently make it possible for United Ways to broaden their support in their local communities.

Senator DURENBERGER. I want to ask you all a general question and would like to have everyone's reaction. As I look at Mr. Chapoton's testimony, he argues with the birth rate issue. He doesn't think the birth rate of foundations is declining, the assets are declining, or what not. You are flying up the wrong flag for the last 10 years according to his testimony. If I assume the correctness of your position about the birth rate issue—or whatever happened 10 years ago that hasn't facilitated the access of people in need in America to those charitable dollars that come through foundations. In part, the decline could be attributed to some of the technical requirements that were put into the act to protect the public and the Tax Code against all those self-dealers and other folks that were out there trying to rip us off through this part of the Tax Code. In part, I suppose it could come from other changes in tax policy, although some of the ones that might affect foundation giving are of such recent origin that I guess you couldn t go back 10 years. And in part, it could come from the discrimination in the code between the treatment of the deductibility of contributions to foundations and private nonoperating foundations and everybody else. And that, of course, is a major part of this legislation, although there are other features in it, but the Secretary goes to some great pains in his written statement to detail the congressional history on the distinctions between contributions to public charities and contributions to private foundations. So, for many years—from 1954 on—that has been the congressional policy, and I believe it is stated that it is the policy, in part to aid one of those institutions—one of those groups—the public charities—and in part, to provide a safeguard against excessive use of foundations.

Now, Assistant Secretary Chapoton doesn't come back and revisit whether that is a good thesis or not. I think he assumes that it is a good thesis, but when he comes out in opposition to that part of 1857 that I am addressing—that is, the contributions treatment—he says the contentions of the private foundation community are their own and cannot support a change in the basic policy of preferential treatment for lifetime contributions to public charities—unless there is substantial evidence that this policy has a serious adverse effect on private philanthropy.

Now, he is suggesting that if you can prove your case that it has an adverse effect on the part of philanthropy, then maybe you ought to get rid of the distinction. And I suppose this is in particular, looking at the charities that are involved here. Is this distinction helpful to one of these segments or the other? Is the original thesis still a good thesis—that having 50 percent treatment to public charities and 20 percent for foundations—does that really help charities or does it hinder foundations? Is that really the problem with the birth rate? Is it more the other technical requirements and so forth?

Mr. JOSEPH. Mr. Chairman, there are several ways to answer that. I would like to speak to the policy question. I think probably Tom Buckman ought to speak to the data point. The argument that there should be a distinction made between the treatment of gifts to public charities and the treatment of gifts to private foundations is the one that I think Mr. Chapoton seems to hang his hat on. That seems hard to accept when he takes that position when the public charities he is basically representing are concerned about, are the ones that are appearing before you, and that appeared before the House Ways and Means Committee, which indicated their support for these changes. That is the first point I would make. The second point I would make in regard to appreciated property is this. That is the primary mechanism by which foundations are established. Therefore, I can see no public policy reason for making that distinction in the treatment of those gifts, particularly since the public charities themselves say that foundation existence is critical to their own work and particularly their own innovation. So, that is why the members on the Council on Foundations overwhelmingly believe that these particular impediments are one of the greatest restrictions to the creation of these foundations.

Senator DURENBERGER. Any other comments?

Mr. BUCKMAN. Mr. Chairman, I would like to comment on the data profile that the Treasury Department uses for its assumption that the foundation field is growing. As I pointed out earlier, we exclude so-called burned-out public charities, and the file contains many of those. The Treasury Department uses a statutory definition because they must, but we use a functional definition, and it is our strong belief that this is the definition that should be used in determining legislation that will be helpful to private grantmaking foundations in growing and serving society. These burned-out public charities distort the data file and have really nothing in common with private foundations except in that label. They have other charitable purposes. They are not grantmakers.

Mr. HASSON. Mr. Chairman, on behalf of the section of taxation, we have one additional comment from our experience in advising potential donors to charitable organizations. The Treasury Department appears to make the assumption that a question of a contribution is an "either-or" proposition—either to contribute to a public charity or the contribute to a private foundation. We can strongly testify from our experience that that is not the case—that many potential donors have an interest in the foundation type of activity, and if there is a major disincentive to their giving, they don't turn to the alternative of giving to a public charity—they simply don't give at all.

Senator DURENBERGER. Thank you. Brian.

Mr. O'CONNELL. As you can imagine, Mr. Chairman, our voluntary organizations took a very wary eye of this aspect of the proposal, but we are persuaded—and unanimously so, which is a rare thing in our organization—that the figures begin to speak for themselves. Ten years ago foundations represented 10 percent of all that is given in this country. Now, it is down to 5 percent. Now, as we analyzed that, the birth rate is not the only factor. There is the factor of the increase in corporate giving—as you would so well know. There is also the factor of the depressed stock market during much of those 10 years. However, with those carefully considered and acknowledged, a very large part of the factor is that birth rate consideration. We are satisfied that it is absolutely so as the Bar Association has just indicated—that it is not a matter of "either-or." We need to stimulate all four sources of income for voluntary organizations, and that clearly the birth rate and growth rate of foundations is a necessary part of that.

Senator DURENBERGER. Yes. Jean.

Mrs. FREEMAN. Yes; I could say on behalf of the Girl Scouts that the fact that we had a large grant from a foundation helped as "seed money" to stimulate individual giving and corporation giving. It was necessary, and I think it is particularly for organizations like ours, to have that kind of support that comes from a foundation which looks very carefully with good staff and good research into the kind of thing that people are doing, and it does stimulate other giving. It is very hard sometimes to get the individual or corporation, otherwise, to giving.

Senator DURENBERGER. Jack.

Mr. MOSKOWITZ. This question as to whether removing this distinction of treatment for charitable gifts by foundations and public charities would have an adverse effect on giving to public charities was discussed in two places in the United Way—one at the United Way of America board of governors—and nobody there felt that it would have an adverse impact—and then second, it was also discussed in our professional advisory committees which are composed of local United Way executives. I have not heard of anybody feeling that equal treatment would result in any adverse impact on giving.

Senator DURENBERGER. Thank you all very much for your testimony. I appreciate it a great deal.

The next panel consists of Robert Bothwell, executive director of the National Committee for Responsive Philanthropy, Mr. William Lehrfeld, on behalf of the Heritage Foundation, and Jan Baran, on behalf of the Knight Foundation.

Gentlemen, I guess you understand the ground rules. Your written statements if you have them will be made part of the record in full, and we will give you exactly 3 minutes to summarize them, and we appreciate your sticking to the time and for coming before us as witnesses today. We will start with Mr. Bothwell.

STATEMENT OF ROBERT O. BOTHWELL, EXECUTIVE DIRECTOR, NATIONAL COMMITTEE FOR RESPONSIVE PHILANTHROPY, WASHINGTON, DC

Mr. BOTHWELL. Thank you, Senator. For 8 years now the National Committee for Responsive Philanthropy has been a very close observer of the foundation world. As you know, we were chartered to do this in order to speak up for several hundreds of organizations with which we work who deal daily with some of society's most important and difficult issues, such as racism, sexism, and neighborhood disintegration. These issues, and others which reduce people to powerlessness, and therefore to personal inadequacy, in our affluent society have been addressed seriously and courageously by some foundations. However, most foundations have avoided these pressing issues.

The record is quite clear, and I do urge the subcommittee members to carefuly review our full testimony in order to comprehend this picture.

In analyzing why this is so, it becomes evident that most foundations will never get much closer to these difficult, controversial issues. Fundamentally, foundations need to hear loud and clear from Congress that they are expected to be far more communicative with people in organizations outside their private and business lives; that foundations were not and are not meant to be private enclaves of wealth, insulated from direct contact with the hoi-polloi; and that the supreme genius of our country has been to adapt to new forces and new leadership rather than to remain embraced in the aging, decaying leadership of the past, as many foundations too often have been. Congress should require that all larger foundations make useful reports available to anyone who requests them.

I want to turn now to a second issue—the important issue of grant administrative expenses, and the limit recommended by the House Ways and Means Committee. We have carefully and thoroughly reviewed two recent GAO reports which analyze foundation expense data. And while, indeed, there are data in these documents which raise important questions about foundation expenses, nevertheless, I will submit to you that there is not a scintilla of evidence presented in these documents justifying the 15 percent proposed limit. In fact, there is not a single figure in these documents which can be identified as having solely to do with "grant administrative expenses." The 15-percent limitation recommended by the House Committee is groundless.

Now, I want to take up a third issue—the birthrate of private foundations. We are very concerned about reports about the birthrate and that it is declining. While we are often critical of foundations, we also strongly support their continued existence. However, to paraphrase W.C. Fields, we do think reports of the death of foundations may be greatly exaggerated. We looked at Foundation Center data, GAO reports, and IRS reports. None adequately support the contention that private foundations are a dying breed, and I would be happy to answer questions about that. We think, therefore, it would be unwise for Congress to eliminate the current differences between contributions to private foundations and public charities, as well as to make any major changes in current law restricting excess business holdings, until Congress gets much better information about foundations' births and deaths and their causes. Thank you.

[The prepared statement follows:]

Testimony of Robert O. Bothwell, Executive Director of the National Committee for Responsive Philanthropy

Good morning. My name is Robert Bothwell. I am Executive Director of the National Committee for Responsive Philanthropy. The Committee is a coalition of hundreds of local and national organizations working on behalf of minorities, women, the elderly, the disabled, the poor, Vietnam veterans, consumers and those who want healthier and better environments. All are concerned about the very low level of private, philanthropic funding for newer and smaller organizations, especially those that are questioning inequities in our society. The Committee is also very concerned about the accountability of private philanthropy to the public.

I first want to thank the Subcommittee for allowing me to testify today and for your interest in foundations.

The Potential of Foundations

Foundations are important and unique instituions. While they account for only about 5% of private giving ($3.15 billion of $60.39 billion in 1982), nevertheless, they have tremendous potential for improving our society. One reason for that potential is their pluralism: There are more than 20,000 foundations, each of which can decide differently which types of people and activities should be funded.

A second reason for foundations' potential is their independence: their existence is not dependent on pleasing the voting public or on making a short-term profit. This independence allows them to take the long view, to resist fads, to support promising activities that may be too controversial for the government to undertake or unprofitable for business to support. As the Treasury Department put it in its important 1965 report, foundations have a "special and vital role" in society, which is to "initiate thought and action, experiment with new and untried ventures, dissent from prevailing attitudes and act quickly and flexibly."

Is This Potential Being Realized?

A. The Funding Patterns of Foundations Nationally.

Many foundations have realized their potential for maintaining the vitality and flexibility of our society and its institutions. Numerous organizations that we work with owe at least part of their existence to foundation support. When a group of people come together to discuss the need for a new organization, inevitably they will talk about the potential for getting foundation support to start the new organization. My organization, which receives substantial money from foundations, yet has often been a very vocal critic of foundations, reflects the willingness of some foundations to support groups that are trying new approaches to problems and that are raising hard questions about the fairness of our society.

Unfortunately, foundations that are willing to support organizations that are new or controversial or that actively work for disenfranchised people are few and far between. As Rockefeller Foundation President Richard Lyman put it recently, the foundation world "often talks pluralism and diversity while enacting the herd instinct and conformity." The vast bulk of foundation money goes to well-established, noncontroversial organizations year after year.

This fact, which we think is the most important fact to understand about foundations, will surprise many people. Foundations have an image, one that is fostered by a lot of rhetoric from New Right organizations, of being active crusaders for social change. For those who care to examine them, studies of foundation funding completely undermine this image of foundations as social crusaders.

The most recent is an unpublished study supported by the Twentieth Century Fund. This study examines the grants made between 1955 and 1979 by 47 of the country's 54 largest foundations. (These 47 account for about 35% of the assets of all foundations.) The study found that only 3.9% of the money given away by these foundations in 1979 benefitted Blacks (a decrease from 5% in 1970), 1.4% benefitted Hispanics and 0.5% benefitted Native Americans.

The study also found that only about one in seven grant dollars given during this 25-year period went to "new grantees," in other words, organizations that the foundations had not supported before. This is a strong indication of most foundations' tendency to continue to fund whatever they have already funded, rather than venturing in new directions.

An indication of most foundations' preference for well-established institutions is the fact that 43.2% of foundation money during this period went to colleges or universities while 8.9% went to hospitals and 8.4% to research institutes.

Many other studies have also uncovered a low level of foundation support for women's causes and minorities. For example, a Ford Foundation-supported study found that only 0.6% of foundation funding in 1976 went to projects intended to improve the status of women. The total--$12 million--was less than the amount of support one university received that year from only three foundations. Also, of this money intended to improve the status of women, only 13% went to "public activist programs." Most of the $12 million went instead to direct services (33%), research (24%) or scholarships (18%).

In 1981, according to Foundation Center data on 369 mostly large foundations, grants benefitting "women and girls" (a much more inclusive category) totaled 2.9%. A 1980 survey of 467 foundations by Women and Foundations/Corporate Philanthropy found that only 2% of foundation funds went to "programs that benefit women and girls."

Concerning Hispanics, a Latino Institute study found that only 1% of foundation support in 1977 and 1978 benefitted Hispanics, with only about one-half of that going to organizations run by Hispanics. More than half of the money benefitting Hispanics (54%) came from one foundation--the Ford Foundation. Again, most of the foundation money benefitting Hispanics supported activities such as education (30%) research (12%), and health services (10%) with only 11% going to "community organization and development." An earlier study sponsored by the National Science Foundation found that in 1972-73 Hispanic groups received 0.8% of foundation funds.

For Blacks, the Foundation Center reports that in 1982 , 2.2% of the money given away by 444 mostly large foundations benefitted Blacks.

As meager as these figures are, we believe they overstate the amount of foundation funding for women and minorities because of the foundations that are examined. Most studies of foundations use as a data base information collected by the Foundation Center. The foundations included in this data base voluntarily send information to the Foundation Center. The very act of reporting information about their grant-making shows that these foundations are much more accountable and responsive than the vast majority of foundations, which refuse to voluntarily provide information. We've found that when a foundation is accountable, when it is willing to tell the public what it is doing with its money, it is more likely that this foundation will respond to the newly recognized needs of women, minorities and other groups that lack power in our society.

B. The Funding Patterns of Local Foundations

When examining studies of foundation giving in local communities, studies that look at many foundations not included in the Foundation Center data base, even less support to minorities, women and newer groups is discovered. For example, a study by the Portland Committee for Responsive Philanthropy found that only 1% of the money given away in 1978-79 by Oregon's 35 largest foundation's went to "women's programs" (compared to 3.9% nationally in 1979 according to the Twentieth Century Fund study of the largest foundations). In Chicago in 1976 only 0.3% of funding by 311 foundations went to agencies "designed or controlled by women," according to a study done by a local association of foundations.

Concerning minorities, in Oregon, only 1% of grant money went to "programs run by or for racial minorities "(there is no comparable national figure). In Chicago, only 4.4% of foundation support went to minority organizations, though Chicago's minority population exceeds 50%. In San Diego, only 2.1% went to "minority organizations" (San Diego's minority population is 21.4%); and only 0.4% went to Hispanic organizations (though Hispanics comprise 13% of San Diego's population).

The San Diego study also provides information that shows very dramatically the concentration of foundation funding in a relatively small number of long-established institutions. Twenty-five organizations received 62% of the money given away by local foundations. Thirteen of these organizations each received more foundation support than all minority organizations combined. Also, the study found that long-established social service organizations with relatively traditional approaches to social problems received seven times more money than did a broad range of organizations begun since 1965 that have a self-help, community-based approach to social problems.

This concentration of foundation funding in a relatively few, well-established institutions is certainly not confined to San Diego. In Chicago for example, 70 agencies received 70% of the funding from that city's foundations, with one recipient--the University of Chicago--receiving 10%, more than double the total received by all minority organizations. In Oregon, 30 institutions received more than half of that state's foundation funding.

As the authors of the Oregon study write: "The point is not that foundations support terrible programs. Rather, the point is that Oregon foundations have channeled their funds into a very few program areas, populations and service philosophies while leaving others virtually untouched."

Which other areas have been ignored? According to the Chicago study, only 1.4% of foundation money went to "neighborhood and community development," which the University of Chicago researchers called a "shockingly small amount." Only 0.8% went to improve the environment. In Washington, D.C., a 1978 study of 153 foundations found that, of funding that benefitted D.C. residents, 2% went to "housing and neighborhood development," 0.25% to "consumer affairs," 0.27% to "employment/labor," and 0% to "natural resources/environment." In Colorado, a study of that state's 25 largest foundations found that, between 1974 and 1976, only 2.7% of their grant money went to "nontraditional" organizations, which included those representing minorities, women and the poor as well as groups avocating for older Americans, youth, consumers and the environment.

These figures about foundation giving should put to rest the myth of foundations as crusaders for social justice and social change. Some foundations have made extremely valuable contributions to social justice; unfortunately, most have not.

These figures also contradict the words many foundation officials use to describe their contributions to society. For example, two years ago, the Council on Foundations told Congress that foundations are so valuable because they can "provide venture capital" for "new ideas and new enterprises" in fields like education, health and social services. Yet, as the studies we cited show, very little foundation support goes to the newer organizations that are trying out new ideas. To cite yet one more study that addresses this issue directly, a study of foundation funding in 1976-77 in the field of aging found that, "the criticism that much foundation giving supports existing programs rather than the development of new ideas is substantiated by our findings." The study found that only one of five dollars spent on aging supported innovative programs or changes in policies affecting the aging.

The Council on Foundations also told Congress that foundations are valuable because they can respond to "newly perceived needs." Yet, as numerous studies document, during the past two decades few foundations have responded to the newly-preceived needs of minorities, women, consumers, and the environment.

Why Have Many Foundations Not Realized Their Potential?

Why is this? Why have so many foundations been so removed from much of what has been happening in this country during the past 20 years?

One major reason has to do with who makes the decisions about who benefits from foundation money. Unfortunately, most of these people come from a very narrow segment of our population. According to John Nason, whose 1977 study of foundation trustees was supported by the Council on Foundations, foundation trustees are a "self-perpetuating social and economic elite." More recently, the Council on Foundations' "Compensation and Benefits Survey" concluded that, "Foundations are still directed predominantly by white males who are nearing the end of their careers." The survey found that nearly seven of 10 foundation trustees are from business, law or banking. It also found that only 3% of foundation trustees are Black (Blacks make up 12% of the country's population). However, this 3% figure probably represents a significant overstatement of Blacks on foundation boards since the foundations included in the survey were mostly members of the Council of Foundations and they were willing to complete the Council's questionnaire. In Oregon for example, only one of the 35 foundations studied had a minority trustee, while 40% had no women trustees. In Colorado only one of 87 trustees of the 25 largest foundations was a minority.

As the Oregon foundation study put it, "if trustees are only drawn from a narrow band of society, then the experiences, skills and interests represented on the board will be equally narrow." The result of this is the kind of funding patterns revealed in the various studies of foundation giving: a relatively few well-established organizations, which often have personal connections with foundation trustees, get most foundation money. Most groups that are newer, that are run mostly by minorities, that are working in poor communities, don't have these personal connections and thus don't get much foundation money.

The relationship between who's on the board and who gets funded was shown clearly in the Latino Institute study of funding for Hispanics. That study found that, of the foundations that gave money to Hispanics, 12% had Hispanic employees and/or Hispanic trustees, a far higher percentage than for foundations generally. Noteworthy, there has been a significant increase in women foundation trustees and staff (23% of trustees, 26% of chief executive officers and almost half of professional staff are women), which we believe is one reason the Twentieth Century Fund study found that funding benefitting females had increased from 0.5% in 1965 to 3.1% in 1979.

Are Foundations Accessible to the Public?

But the problem is not simply who sits on foundation boards. The problem is also the attitudes held by most of those people and the actions they take on behalf of their foundations. According to John Nason, most foundation trustees "continue to think of the foundation as the donor's or as 'ours' and resent suggestions for greater accountability, greater accessibility, greater diversity of viewpoint on the board."

We believe accessibility is a key factor, and it is in this area that Congress can mandate changes. Even if you don't personally know a trustee of a foundation it's possible to make your case to that foundation if it is accessible. If there is information about a foundation readily available, you can find out what it has supported in the past, how large its grants are, what its application process is and where to send a proposal. If there is a staff person, you can find out whether the foundation might be interested in your project, plus there is someone who can review your proposal. The Latino Institute study found that 92% of the foundations that supported Hispanics had staff, a far higher proportion than for foundations generally.

Unfortunately, too many foundations do not make information readily available nor do they have even a part-time staff member to interact with the public, nor do they conduct periodic public meetings. Nationally, according to the Council on Foundations, only about 500 of the country's 22,000 foundations publish annual reports. In Oregon, 45% of the foundations responding to a questionnaire said it is not important for the public to know about their grant programs. In San Diego, only 2% of local foundations publish annual reports.

In 1980, we evaluated the information given to the public by 208 of the country's largest foundations. We found that 30% of these foundations refused to provide any information about their activities after as many as six requests. Thirteen of these large foundations did not even have phone numbers. We also found that the information provided by another 30% of the 208 foundations did not meet a minimally "acceptable" standard, while only eight of the 208 could be rated excellent in what they disclosed to the public. Those eight are very important, however, because they show that some foundations agree that full disclosure is important and that it can be done.

The finding about phone numbers made us curious: How many foundations don't have phone numbers? In looking through the latest Foundation Directory, which includes brief descriptions of the 3363 largest foundations, we found that 1575 of them did not have a phone number in their listing. Could a grant seeker get a phone number by calling information? We checked a randomly selected sample of 10% of these 1575 foundations, and found that, for 58% of these foundations, it was impossible to obtain a phone number, even by asking for the number of the company or bank that houses the foundation. This would translate to 27% of all the foundations listed in the Directory. All of these foundations have assets of $1 million or more or make grants exceeding $100,000 a year.

Fortunately, in 1969, Congress mandated that foundations provide basic information to the Internal Revenue Service and that this information be made available to the public. All foundations must file 990 annual reports, which are the basis for most information known about foundations. However, for years we heard complaints that foundations were not including required information in these 990 forms. A small study we did in 1980 confirmed this problem. Then, last year, the General Accounting Office examined foundation annual returns. We think its findings, released in May, are extraordinary. The GAO found that 94% of the foundations it studied fail to report all key information required by the IRS. About 70% fail to provide complete information on 25% or more of the key items of information reviewed by the GAO. One of the most neglected pieces of information concerned the grants made by foundations (79% do not completely report this information), which is vital information for grant seekers. Also, nearly a third of the foundations do not include the name and addresses of the foundations' managers, which are also critical to grant seekers.

All of these studies point to one conclusion: too many foundations are not accessible to the public or to grant seekers. This stems from an attitude held by too many people in the foundation world: that foundation officials know everything they need to know to make good funding decisions, and that grant seekers are just not that important. This attitude is expressed very well by Roger Williams, writing in the Rockefeller Foundation Quarterly: "Despite signs of improvements, inquiries among people who have sought grants still turn up one unhappy, frustrating experience after another: phone calls not returned; phones not even answered; proposals not dealt with after their submission was encouraged; foundation officials who are forgetful, flip, arrogant; foundations that are uncommunicative about their goals, procedures, and reasons for rejecting proposals."

One crucial result of this attitude is that the people who run foundations "tend to be the farthest removed from the problems they're addressing," in the words of Bill Dietel of the Rockefeller Brothers Fund. Many foundations simply don't know what is happening in our inner cities, or in rural America, or anyplace else that is not frequented by the mostly wealthy and white people who run most foundations. We don't doubt that foundation people care a lot about our society and want to improve it. But as Emory Bundy, a former trustee of the American Home Foundation put it: "I believe (trustees') intentions are good, but their social horizons are circumscribed by their life experiences."

Should Foundations Be Accessible and Accountable?

Is there anything wrong with this? Should foundations be accessible to grant seekers? Is being accessible a critical part of foundations' public responsibilities? Why should foundations have public responsibilities?

We and many other people believe that foundations definitely have public responsibilities--foundations must be accountable to the public. The most obvious reason concerns the very significant tax benefits that the public bestows upon foundations--their income is tax exempt; gifts to them are tax deductible. If these tax benefits didn't exist, part of the money foundations control would have been public money. Therefore, this means foundations have an obligation to be accountable to the public in their use of this money, and accountability begins with full disclosure. As conservative columnist James J. Kilpatrick put it, "...some public judgment (is necesary) on the desirability of the diversion of otherwise taxable income."

There are many other reasons why foundations should be accountable to the public. One is that foundations [illegible] dealing with public needs. As Waldemar Nielson, author of The Big Founda[illegible]ns, writes, "The public has a direct interest in tax-exempt foundations (because) the fields which foundations support, such as education, religion, and health, are themselves of direct interest to the public." Alan Pifer, former president of the Carnegie Corporation, expresses essentially the same view: "Foundation funds...offer a case when a technically private asset is of such potential value to the nation that it must, perforce, be regarded as a public asset." The Council on Foundations, in its "Policy on Public Information," states, "Foundations exist to facilitate the application of private resources and private initiatives to the public good, and it is this capacity for public benefit which justifies their tax exemption."

Foundations also have a legal obligation to be accountable to the public. This stems from the trust agreement which is the legal basis of foundations. All trust agreements require that a trust's administrators be responsible both to the terms of its charter (presumably the intent of the donor) and to its beneficiaries. In the case of a foundation, the beneficiary is the public. John Nason believes this is the most compelling reason why foundations have responsibilities to the public: "Foundation trustees are servants of the public because the public, whether in broad or limited aspects, are the beneficiaries."

According to the 1970 report of the Peterson Commission on Foundations and Private Philanthropy, a big reason foundations should be accountable is to insure that foundation funds are not misused. The commission quoted Justice Brandeis: "Sunlight can be the most powerful disinfectant." The 1977 annual report of the Committee of the Permanent Charity Fund in Boston said essentially the same thing: "Among the most important guarantees in the long run that a charitable trust's funds will be used in the public interest are the independent auditing and the full disclosure of what it is doing through annual reports to the public..."

These concerns about the possible misuse of foundation funds suggest yet one more reason that foundations should be publicly accountable. In the words of Ford Foundation President Franklin Thomas, "The way you really enjoy your privacy as a foundation, ultimately, is to be accountable for what you do." Forty years ago former Carnegie Corporation President Frederick Keppel explained why: "The public is most likely to become suspicious when it is uninformed..."

One of the most important reasons for a foundation to be accountable to the public is that doing so will help it make better grants. Part of this is that the very process of being accountable can be helpful to a foundation. In trying effectively to communicate its purpose to the public, a foundation often will have to rethink its purpose. And as the 1979 annual report of the Twentieth Century Fund states, "A conscientious and thorough reevaluation will ...serve to redirect and revitalize foundation programs..." Periodic public accountings, whether by preparing annual reports or holding public meetings, can involve foundations in a process of self-evaluation that is vital to growth and self-renewal.

Also, being accountable to the public can help expose the foundation to parts of the public that it had overlooked. According to Bill Bondurant, Director of the Babcock Foundation, holding a public meeting allowed the foundation to "hear from voices we wouldn't ordinarily hear from..." He said that it caused the Foundation to support at least one relatively new organization--the Brown Lung Association.

Both the Council on Foundations and the prestigious Filer Comission on Private Philanthropy and Public Needs agree that foundations should be accountable and accessible, both by disclosing information about their activities and by broadening their boards. The Filer Commission, which spent three years studying philanthropy in the early 1970s, recommended that foundations (and other larger charities) "make readily available detailed annual reports on their finances, programs and priorities," and that they hold annual public meetings. The Commission also recommended that foundations "recognize an obligation to be responsive to changing viewpoints and emerging needs and that they take steps such as broadening their boards and staffs to insure that they are responsive."

The Council on Foundations, in a 1973 official policy statement on grant-making, stated that, "Too often foundations have proved inaccessible and their decision-making processes cloaked in secrecy." The Council believes that, "Out of the public trust vested in foundations grows the need to accept the principle of full disclosure...." The Council also stated that, "diversified boards and staffs will tend to insure the sensitivity of foundations to the needs of segments of the society who have too often been denied adequate voice and representation."

Recommendations to Improve Accountability and Accessibility

Regarding written accountability, during the past decade there have been improvements in the information available to the public about foundations, thanks mainly to Congress (which passed the Tax Reform Act of 1969) and the Foundation Center. However, as we have explained, there are still serious inadequacies.

One inadequacy concerns the incomplete reporting of information to the IRS which the recent General Accounting Office study documented. We urge this Subcommittee to join the House Ways and Means Committee in directing the IRS to fully enforce present law and rules concerning disclosure of information by foundations in their Federal 990-PF returns.

The IRS recently required that foundations disclose several additional items of information, such as application deadlines. These additional requirements were needed. There is one more item of information that should be disclosed: foundations should be required to indicate the racial/ethnic and sexual composition of their boards, staffs and managers. This information would allow Congress and the public to monitor how well foundations are moving to reflect the great diversity of this country.

We also urge Congress to take steps to deal with another problem involving information about foundations--its accessibility. The Foundation Center has done an excellent job of getting information to grant-seekers through the Center's extensive network of libraries. But there is twofold problem: there are still many people who live a long distance from one of the Center's collections, and most of these collections only have 990 annual reports for local foundations. We recommend that Congress require all larger foundations (with assets exceeding $1 million or grants of $100,000 or more) to make simple annual reports available to the public on request within 60 days at cost (not to exceed $1). At a minimum these reports could be simple copies of their 990PFs, or should contain key information from the 990PFs. As the practice of making such reports available to the public becomes better accepted, we expect foundations to expand the content of these reports to include the additional important information that many foundations now include routinely in the annual reports they voluntarily make available to the public.

Also, larger foundations should be required to advertise the availability of their annual reports in the largest circulation newspaper in their communities. Currently, foundations are required to advertise the availability of their reports, but many do so in small circulation papers read primarily by lawyers. By requiring foundations to advertise in a paper read by the general public, a lot of people would learn for the first time about local foundations.

We also recommend that larger foundations be required to hold annual public meetings of their trustees. We believe this would be a significant step toward greater interaction between the public and foundations.*

We believe these modest changes will not only in themselves improve foundations' openness and accountability, but that they will also help stimulate much more concern within the foundation world about the desirability of openness and the need to be accountable to the public. As we've explained, we believe that when foundations become more open and accountable, they will become more responsive to less-established organizations and newly-perceived needs.

Other Factors That Impede Foundations' Responsiveness.

There are at least four other factors that contribute or might contribute to the reluctance of foundations to support many newer, smaller, sometimes controversial organizations.

A. Expenditure Responsibility

One factor involves the requirement that foundations comply with detailed "expenditure responsibility" requirements when they make grants to organizations that do not have public charity status, which many newer organizations do not have. As Congressman Conable said when introducing a bill that would eliminate this requirement (H.R. 3043, sponsored also by Congressmen Frenzel, Shannon & Gephardt), "this administrative burden discourages foundations from making many small but worthwhile grants."

When foundations are considering making a grant to a non-public charity, they must conduct a pre-grant investigation of the prospective grantee, write a formal grant agreement, obtain periodic accountings from the grantee, and file an annual report with the IRS on the use of grant funds. Now much of this seems reasonable. And many foundations routinely undertake the first three tasks even with grantees that are public charities.

But the last requirement--that each such grant, no matter how small, must be reported in detail to IRS--has had a tremendous chilling effect. Many foundations are extremely unwilling to risk an IRS audit of their expenditure responsibility grants.

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*We are not recommending opening up the business meetings of a foundation board, but that an annual meeting of a foundation's trustees be held to which the public is invited to learn of a foundation's priorities and practices and to raise questions about them.

Understand that foundation grants for 501(c)(3) organizations, particularly when the grant documents clearly state the "charitable, educational, research, scientific" or other appropriate purposes of the grants, are subject to no such reporting requirement nor IRS scrutiny unless great controversy attaches to a grant or grantee.

Particularly hard hit by the expenditure responsibility law are grass-roots organizations, especially newer and smaller ones, such as neighborhood organizations, rape crisis centers and self-help groups for the disabled. Their purposes are just as legitimate as those of the large, well-established charities and universities which normally receive foundation monies; they simply don't have the resources or expertise needed to go through the process of obtaining IRS recognition as a public charity. Ironically, if they could get a small "seed" grant from a foundation, many would be able to go through that process.

A 1980 survey by the Council on Foundations revealed that, "Before 1970, over one-third (of the 271 reporting foundations) made the type of grants that now require expenditure responsibility. Thirty percent (30%) of those foundations now have a policy against making such grants." Overall, "About 40% of all (271) responding foundations have policies that prevent them from making grants that require expenditure responsibility." These figures show the law's chilling effect, but they don't reveal that many other foundations also do not make expenditure responsibility grants even though they have no formal policy.

The House Ways and Means Committee did not go far enough in its recommendation on expenditure responsibility. We recommend that Congress revise the current law so that foundations do not need to report grants under $5,000 to organizations not recognized as public charities, as long as total grants to a single grantee do not exceed $5,000 in a given year. Except for a lesser threshhold amount, our recommendation is exactly as that contained in S.1857 introduced by Senators Durenberger, Moynihan, Bradley and Matsunaga.

Such a change would not in any way affect the explicit statutory requirement that every foundation grant, large or small, must support a recognized charitable, educational, research, scientific or other approved activity.

And, as Rep. Conable said when introducing HR 3043,(which contains proposed relief on expenditure responsibility similar to that proposed by Senators Durenberger et al): "Nor would the amendment affect strict IRS requirements that foundations making grants to non-exempt grantees make every reasonable effort, including requiring periodic reports from grantees, to ensure that every grant dollar is spent for the designated charitable purpose."

B. Limits on Foundations in Supporting Grantee Lobbying

Another factor that impedes foundation support for potentially controversial organizations is the strict prohibition (included in the TRA of 1969) on foundation support for propaganda or other attempts to influence legislation. There are strong tax penalties on foundations and foundation managers who knowingly violate this prohibition (Sect. 4945 of the Internal Revenue Code.)

While generally understood to prohibit foundations from directly engaging in such activities, this action also has been interpreted by some foundations to absolutely prohibit them from making grants which may involve some lobbying. Often they expressly prohibit grantees from using granted funds to carry on propaganda or otherwise to attempt to influence legislation.

Universities and other large, well-established nonprofit organizations can easily accept these restrictions, because they have adequate funds from other sources to enable them to lobby, but smaller organizations do not. For many organizations, foundation grants may make up a major part of their budgets. Either they take the foundation seriously which says they cannot use the funds for lobbying or they use some of the funds for lobbying knowing they run the risk of foundation retribution if they should be found out.

However, public charities have always been permitted to do some lobbying. Moreover, the Tax Reform Act of 1976 expanded the amount of lobbying charities can do--up to 20% of total expenditures for smaller organizations.

The problem, thus, is that the law is confusing as to whether or not foundations can support legitimate lobbying by public charities. Currently an IRS letter ruling provides guidance. But IRS has not made this into a revenue ruling, which has more force, and thus the situation remains very murky. Timorous foundation officials afraid of running afoul of IRS, and public charity leaders ignorant of the IRS letter ruling, therefore, combine to provide us with less venturesome foundation funding.

We recommend that Section 4945 should be amended to remedy this situation.

C. Voter Registration

Current law restricts foundation support of voter registration drives to those conducted in five or more states; additionally they must be nonpartisan and cannot be confined to one election period. This law seems to have worked very well to curb the abuses in the 1960s which led to its enactment, while still permitting support of many worthwhile voter education efforts.

Nevertheless, requiring a minimum five state scope makes it virtually impossible for newer, smaller, more localized organizations, to obtain foundation support for voter registration drives they might want to undertake. The House Ways and Means Committee recommended eliminating the five state requirement while retaining the other existing controls. We recommend the same.

D. Limit on Grant Administrative Expenses

The House Committee on Ways and Means recommended a 15% limit on grant administrative expenses which may be counted as qualifying distributions toward the mandatory payout, adding that "administrative expenses made directly for the active conduct of exempt activities of the foundation will not be treated as grant administrative expenses subject to the limitation."

The Council on Foundations opposes the 15% limitation, saying that the new rule should be imposed only after (1) a clear showing that additional regulation is required, and (2) a careful analysis of the impact of the rule. We wholeheartedly agree.

We have carefully and thoroughly reviewed two recent GAO reports which analyze foundation expense data.[1] While indeed there are data in these documents which raise important questions about foundation expenses, nevertheless, there is not a scintilla of evidence presented in these documents justifying the proposed 15% limit on grant administrative expenses. In fact, there is not a single figure in these documents which can be identified as having solely to do with "grant administrative expenses." The 15% limitation recommended by the House is groundless.

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[1] Statistical Analysis of the Operations & Activities of Private Foundations, GAO/GGD 84-38, Jan. 5, 1984, and "Analysis of Private Foundation Disbursements for Exempt Purposes Other than Charitable Contributions - Tax Year 1979," GAO, Sept. 1983, prepared for House Ways & Means Oversight Subcommittee staff.

Our concern about this being perhaps a very bad rule, however, is uniquely our concern rather than the Council's. The issue is accessibility of nontraditional chariites to foundation monies. It has long been suspected that foundations which have paid professional staff are easier for nontraditional seekers to approach than those which have no staff, and that those which have more staff are generally more accessible than those with few staff (considering foundations of similar size). This is of critical importance to nonprofit organizations who know no foundation trustees, whose work is not well known, and who may be so new as organizations that they don't know much about seeking foundation grants.

Recently a research study helped confirm the above suspicion. A Latino Institute study (Responsiveness of U.S. Foundations to Hispanic Needs and Concerns, 1980) found, as mentioned earlier, that 92% of the foundations that made grants to Hispanics or to benefit Hispanics had fulltime staff; yet the overwhelming majority of foundations have no fulltime staff. Additionally the study found that 12% of the foundations that gave money for Hispanic activities employed Hispanics.

These data suggest how important staff are to funding groups that generally do not receive foundation monies.

It would be very unwise to force foundations to cut back on staff and relevant administrative expenses just as foundations are learning that adding staff is the one of the best ways they can improve minority, women's and other nontraditional groups' access to foundations. We recommend, therefore, tabling the House Ways and Means Committee recommendation for a 15% limit on grant administrative expenses which may be counted as qualifying distributions toward the mandatory payout, until proper investigation is made of whether or not a serious problem exists and of what impact such a 15% limit would have.

The Health of Foundations

While we are often critical of foundations, we also strongly support their continued existence, as we stated in our introduction. We are thus concerned about reports that the birthrate of foundations is declining. However, to paraphrase W.C. Fields, we think reports of the death of foundations may be greatly exaggerated.

A. Birthrate of New Foundations and Its Relationship to the TRA of 1969

It has been suggested by some people that the birthrate of new foundations has declined because donors do not have as much tax incentive to give to private foundations as to public charities, and because of the whole set of regulations imposed on private foundations by the Tax Reform Act of 1969, such as the requirement that foundations dispose of excess business holdings.

Before Congress accepts this argument, however, it needs to examine available statistics.

According to Foundation Center data, only 40 foundations with $10 million or more in assets were established during 1970-1979.[1] But, according to a recent

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[1] Patricia Read, Foundations Today, 1982, the Foundation Center, New York, 1982.

Internal Revenue Service publication, "The number of foundations with assets of $10 million or more increased from 354 to 490 (between 1974 and 1979)....Therefore, these data do not support the position that foundations are a dying breed."[1] Now to some extent these figures are not comparable (since the former only concerns the establishment of new foundations, while the latter also includes foundations that increased in size, operating foundations and foundations that are really former public charities which now fail to meet the "public support" test).

The Foundation Center data also show that more foundations with $10 million or more in assets were established in the 1960s (78) than in the 1970s (40). But, surprisingly, the decrease in the number of new larger foundations did not begin in the 1970s: more larger foundations were established in the 1950s (160) and the 1940s (142) than in the 1960s (78). Obviously, the decline in the 1960s had nothing to do with the TRA of 1969.

While the GAO's recent report confirms Foundation Center trend data that more grantmaking foundations were started in the 1960s than in the 1970s, the report also presents other data of interest; e.g. the 4143 total grantmaking foundations created in the 1970s are not a lot less than the 5506 such foundations created in the 1950s and more than twice the 1774 begun in the 1940s; and e.g. the increase in contributions to foundations between 1974 and 1979 has exceeded the growth of GNP during this period[2]

But even if the birthrate of foundations declined during the 1970s, would not the decline indicate that the 1969 laws were successful in eliminating the establishment of foundations which grossly abuse their tax-exempt privileges? Foundations like this clearly existed prior to 1969, and the TRA of 1969 was intended to eliminate them from the foundation world.

In summary, before the regulatory controls enacted in 1969 are weakened, we need to have better data on exactly what has been happening in the foundation world, and why. There is a study of the birthrate of foundations beginning at Yale, which will provide some of this information. At this time it is simply not clear that we have a birthrate problem. Maybe the TRA of 1969 has acted as an effective birth control program preventing undesirable, unwanted foundations, which would have, by their financial abuses, sullied the reputations of the responsible foundations, as happened in the 1960s. Careful study is needed before changing the regulatory controls enacted in 1969.

B. Lesser Tax Incentives for Gifts to Private Foundations

If, however, Congress decides that foundations should receive more of the tax benefits received by public charities, then we strongly urge that any increase in tax incentives for gifts to private foundations be accompanied by substantially increased public accountability requirements. After all, increases in tax incentives mean fewer dollars for the public treasury through income or estate taxes. The tradeoff is clear.

We recommend the following additional requirements in exchange for better tax incentives to create private foundations:

1. Must meet all requirements for improved accountability and accessibility recommended previously (pp. 9-10);
2. Must not pay excessive trustee or staff compensation;
3. Must have a diversified board of directors including minorities, women and others for whom the courts have ruled in discrimination cases;
4. Must have diversified assets, rather than assets concentrated in one company;

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[1] Thomas B. Peska, "An Examination of Private Foundations for 1979," Statistics of Income Bulletin, Vol. 2, No. 2, fall 1982, Dept. of Treasury, Internal Rev. Serv. p10

[2] Statistical Anal. of the Operations & Activities of Private Fds. GAO, Jan. 5, 1984.

5. Must pay out at a rate substantially higher than the minimum requirement of 5% of assets.

C. Excess Business Holdings

And, if Congress decides that the excess business holdings requirement has been too discouraging for some who may have wanted to create new foundations, then we recommend that Congress accept The MacArthur Foundation's proposal That proposal would keep the current law, but allow the Secretary of Treasury to extend the period of time during which foundations must dispose of excess business holdings acquired after 1969.

D. Excise Tax

For years this tax on net investment income has produced far more revenue than necessary to administer the laws and regulations governing private foundations. Fewer grants to important nonprofit activities are the result. The House Committee on Ways and Means recommended reducing this excise tax from 2% to 1%, "provided that the foundation's current payout for charitable purposes is increased by an equivalent amount." We recommend the same. If Congress adopts this recommendation, and all grant-making foundations act upon it, over $30 million more would become available annually to nonprofit organizations still searching desperately for ways to replace significant government funds lost through real dollar budget cuts these past few years.

E. Payout Rate

According to some people, another factor that has reduced the health of foundations is the requirement that each year they must pay out a certain percentage of their assets. Two years ago, foundations successfully argued that the then existing requirement (5% of assets plus all income greater than 5%) in combination with runaway inflation were causing a significant decease in foundation assets. Congress thus lowered the payout rate to a straight 5% of assets.

However, as with data concerning the birthrate of foundations, we have questions about data concerning the declining assets of foundations. We also have concerns about the effects of a lower payout rate on the recipients of foundation grants, especially now that many charities are struggling because of the severe cuts in government funding. Because we believe the payout rate question will come up again, we want to review the data and offer our recommendation.

The justification for changing the payout rate in 1982 was that inflation and the payout requirement were combining to wipe out foundation assets. If one looked only at how 1972 data compared to more recent data, one would have to agree that foundation assets were declining (that is, if we conveniently forget how high the stock market was in 1972, and how overvalued were so many stocks). If one examines Foundation Center data over a longer period of time, however, one will find that foundation assets declined only 10% between 1965 and 1979 (in constant dollar terms). Also, foundation assets did not decline at all between 1975 and 1979 (the most recent years for which we have data).*

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* Patricia Reed, *Foundations Today, 1982*, The Foundation Center, New York, 1982, Table 13.

Therefore, we believe there was little justification for lowering the payout rate in 1981.

Also, we are very concerned that the lower payout rate is hurting nonprofits. The Urban Institute estimates that because of Federal budget cuts, $115 billion less will be available during FY 82-86 in program areas of principal concern to nonprofits and that $31 billion of that will be a direct loss of nonprofit revenues. While foundations can't begin to make up for this revenue shortfall, nevertheless, a higher payout rate could help. We recommend a payout rate of 5% plus one-half of all income greater than 5%. If foundation income and assets today are similar to what they were in 1979, then our proposed payout rate would increase the income of nonprofits by $100-350 million annually.*

Summary of Recommendations

Once again I want to reiterate: the National Committee for Responsive Philanthropy believes that private foundations are important and unique institutions. They add a very important dimension in private giving for the benefit of public good in our country. Their great diversity and independence means there are greater possibilities for financial support for new, untried, struggling, and sometimes controversial nonprofit organizations than if sources of potential support for nonprofits were limited, say, to government, corporations and United Ways.

But, also as I have indicated, while many foundations are fully accessible and accountable to the public, much beyond what the law requires, there are far many more who hardly begin to live up to their responsibilities as quasi-public institutions.

Following is a summary of our recommendations, therefore, to improve foundations' accessibility and accountability.

1. Following the GAO report's recommendations, Congress should direct the IRS to fully enforce present law and rules for disclosure of information by private foundations in their Federal 990-PF annual reports.

2. Congress should require foundations to indicate the racial/ethnic and sexual composition of their boards, staffs and managers in their required 990-PF's.

3. Congress should require all larger foundations (with assets exceeding $1 million or grants of $100,000 or more) to make simple annual reports available to the public on request within 60 days at cost (not to exceed $1). These reports at a minimum could be simple copies of their 990-PFs or should contain key information from the 990-PFs.

4. Congress should require larger foundations to advertise the availability of their annual reports in the largest circulation newspapers in their communities.

5. Congress should require all larger foundations to hold annual public meetings of their trustees.

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*The higher figure is based on Thomas B. Petsha's analysis and conclusions in "An Examination of Private Foundations for 1979," Statistics of Income Bulletin, the Department of Treasury-Internal Revenue Service, Vol. 2, No. 2, fall 1982 p. 12.

On the decline in the birthrate of new foundations and the concern of some that key provisions in the Tax Reform Act of 1969 should be changed to encourage more growth in new foundations, we consider the data presented to justify these changes as inadequate and recommend that further study be made of why the decline has occurred.

However, if Congress decides it wants to encourage more growth in new foundations by changing key provisions of the Tax Reform Act of 1969, we recommend the following.

6. If Congress decides to improve tax incentives for gifts to private foundations, to make them more comparable to incentives for gifts to public charities, then Congress should require the select foundations which want to utilize the expanded tax incentives to comply with the following:

a. All of the above recommendations;

b. No excessive trustee or staff compensation;

c. Diversified board of trustees, including minorities, women, and others for whom the courts have ruled in discrimination cases;

d. Diversified assets, rather than assets concentrated in one company; and

e. A payout rate substantially higher than the minimum requirement of 5% of assets.

7. If Congress decides to modify the excess business holdings requirements, then Congress should accept the MacArthur Foundations' proposal, which would keep the current law, but allow the Secretary of Treasury to extend the period of time during which foundations must dispose of excess business holdings acquired after 1969.

Additionally, if Congress, indeed, is concerned that more foundation money become available to assist the important work of private nonprofit charities, we recommend the following:

8. Congress should enact the House Ways and Means Committee recommendation that the excise tax on foundations' net investment income be reduced from 2% to 1% provided that foundations' current payout for charitable purposes is increased by an equivalent amount, thus increasing foundation grantmaking by $30 million or so.

9. Congress should reconsider the mandatory payout rate precipitously enacted in 1981 and establish a rate of 5% of assets plus one-half of all income greater than the 5%, thus increasing foundation payout by $100-350 million.

Finally, in order to further improve foundations' responsiveness to less established organizations and newly perceived needs, we recommend the following:

10. Congress Should revise the current "expenditure responsibility" law so that foundations do not need to report to the IRS about grants under $5,000 to organizations not recognized as public charities, as long as total grants to a single grantee do not exceed $5,000 in a given year.

11. Congress should amend Section 4945 of the Internal Revenue Code to make clear that foundations may make grants to public charities which may involve lobbying permitted under the Tax Reform Act of 1976.

12. Congress should further amend Section 4945 to eliminate the five state requirement for foundation supported voter registration drives, while retaining the other existing controls on such drives.

13. Congress should table any proposal to impose a limit on foundations' grant administrative expenses which may be counted as qualifying distributions toward the mandatory payout until proper investigation is made to determine any need for such a limit.

STATEMENT OF WILLIAM J. LEHRFELD, ESQ., LEHRFELD & HENZKE, P.C., WASHINGTON, DC, ON BEHALF OF THE HERITAGE FOUNDATION, WASHINGTON, DC

Mr. LEHRFELD. Thank you very much, Mr. Chairman. I am William Lehrfeld, and I serve as special counsel for the Heritage Foundation, a public policy research organization. We have some technical problems with the bill starting with the fact—at least it appears to us—that the way the bill is drafted. You, Senator, could give 100 percent of your adjusted gross income to the Knights of Columbus and not have any percentage limitation on your gift as would apply to a gift to the United Way or Girl Scouts. Secondly, there is a drafting omission of the phrase "or for the use of" that is contained in section 170(a) and not contained in section 170 (b)(1)(A). That should be corrected. Those errors aside, it gives us the opportunity to recommend to the Congress that the entire 20-30-50 tier system for limitations on individual contributions be reexamined; and I think that once you reexamine the system you will realize that currrent law is too complex. It only makes a profit for us lawyers—it really doesn't solve what you are trying to do—mainly provide certain contribution incentives—measured incentives—to those organizations which you believe are supposed to be doing the job for society.

The other consideration that we would like to deal with is the definitions for disqualified persons. The definition for family member could be limited even further if you are going to deal with excess business holdings; in the excess business holdings area—unlike the self-dealing area—you are disposing of the tainted stock, gradually, through the transition rules. As such, Congress can justify a separate, lesser inclusive standard for family membership in dealing with stock ownership that you would in protecting foundation assets from abuse by a family.

We think the disjunctive threefold test for expenditure responsibility should be repealed. It serves no useful purpose. It acts as an administrative barrier to new organizations, new ideas, and new people entering the field of philanthropy. What it does is create a form of baggage for those organizations that have professional staff, for they must not only identify those charitable activities which are worthwhile of obtaining foundation grants, but then they must go through this highly legalistic and, I would say, loosely administered provision in order to protect themselves and their foundation from these peculiar rules. The IRS now reviews all new organizations anyway. The section 4945(d)(5) taxable expenditure rule for noncharitable grants would tax any grant that is made to an improper purpose, and the regulation of philanthropy by the States also assists in making sure that money is dedicated to the public where it will serve that purpose. Lastly, I would urge that the committee consider the possibility that section 4943 be repealed in its entirety. I think that section—more than any other—probably has a lot to do with the failure of real growth or insignificant growth in the private foundation area. If section 4943 was truly important, you might extend it to all public charities, like the Girl Scouts, because if you are allegedly diverted from doing charity while operating a business, then perhaps the rule ought to be extended to operating charities. If it makes no sense to extend it to operating charities, it makes no sense to retain it for private foundations. But I don't thihk anybody wants that.

Senator **Durenberger**. Thank you very much. Mr. Baran.

[The prepared statement follows:]

TESTIMONY OF WILLIAM J. LEHRFELD, SPECIAL COUNSEL FOR THE HERITAGE FOUNDATION

William J. Lehrfeld, and the firm of Lehrfeld & Henzke, serving as Special Counsel for The Heritage Foundation, Washington, D.C. endorses and supports the enactment of S. 1857 but would prefer to enhance it by some of the suggestions made in this statement. We would also like to provide the Subcommittee with a supplemental written statement after your receipt of oral testimony, and other written statements by interested organizations. The observations made herein concern not only the bill itself but include some recommendations presently germane to its text.

I.

Section 1 of the bill, dealing with deductions for contributions to private foundations, to a modest extent, enlarges the opportunity for charitable giving to private foundations. However, unless we misperceive the effect of Section 1(a)(1)(B), by striking out subparagraph (B) of Int. Rev. Code Section 170(b)(1), we find no individual percentage limitations with respect to contributions by individuals to organizations described in Section 170(c)(3) (veterans organizations), Section 170(c)(4) (fraternal societies), or Section 170(c)(5) (cemeteries). Although these organizations are described in Section 170(c), they are not described in Section 170(b)(1)(A) and the 50 percent current ceiling does not affect them. By deleting Int. Rev. Code Section 170(b)(1)(B), any individual can give, in effect, 100 percent of his adjusted gross income to these special charities and receive a deduction. We do not believe it is the intention of Congress to provide that charitable contributions to this group of deductible organizations shall be without any percentage limitations.

It appears that the primary purpose of the proposed legislation will be to treat contributions of cash and appreciated property to foundations the same as contributions to public charities. While this is laudable, it again raises the question of whether or not the three tier system providing for a 20 percent limitation in some circumstances (assuming that technical error is corrected), 30 percent limitation in others (appreciated property contributions) and 50 percent limitation for others (cash and appreciated property admixed) is really a worthwhile system for the Congress to support and approve. This is a policy decision which we believe your Subcommittee should address at this time.

Lastly, we believe that at least one technical correction should be made: Namely, that would be the insertion of the phrase "or for the use of" in the first line of Section 170(b)(1)(A). This insertion would mean that contributions to trusts, or out of pocket contributions by individuals would be subject to the same percentage limitation when given to public charities and private foundations as would direct contributions "to" charities under existing law. We see no public policy reason for continuing this disparity of treatment between contributions to public organizations and contributions "for the use of" public organizations if the deduction limitations for private foundations are going to be made compatible with contributions to public charities.

II.

In Section 2(a) of your bill, the definition of a family member for purposes of applying the Chapter 42 excise taxes is amended to limit the taint to grandchildren of a person otherwise classified as a disqualified person. The principal area where this will be of benefit is in the recordkeeping of private foundations who must know who their disqualified persons are in connection with possible self dealing transactions and in connection with possibilities of making computations of excess business holdings. Under present law, an original donor to a private foundation, classified as a disqualified person under Int. Rev. Code Section 507, would continue to taint his or her family, and spouses, into all unborn generations. We are unable to discover any justification for this arithmetically expansive view of possible "abusers" of foundation properties. While we believe your bill would ameliorate, in some measure, the hardships which now prevail in the current, infinite family group, we believe that its impact on, for example, Section 4943 will not be significant. Unlike Section 4941, where there are continuous opportunities to utilize a private foundation in self dealing transactions through assets which a foundation is entitled to own, Section 4943 gradually requires the dissipation of foundation assets which are denominated as excess business holdings. We believe a separate, more liberal, rule for defining family members should apply for Section 4943 than applies for Section 4941. In all event, self dealing should be disapproved regardless of the time between the original donor's action and an unauthorized transaction between his descendants and the "family" foundation. However, that same thesis is not supportable in dealing with stock which may be bequeathed to a private foundation by family members and where one must keep a continuing measure of the ownership percentages and values of foundation managers and their families and disqualified persons and substantial contributors and their families. We believe your provision should, solely for Int. Rev. Code Section 4943 purposes, be liberalized by stopping the taint at "children".

III.

Edwin J. Feulner, Jr., President of the Foundation, recommended to the Committee on Ways and Means, on June 27, 1983, that the Congress rewrite the rules defining "substantial contributor" to a private foundation now found in Int. Rev. Code Section 507(d)(2). It could create a "moving contribution test" which eliminates the classification of substantial contributor if a substantial contributor has the total of all his prior contributions fall below the two percent mark of the total of all contributions made to a private foundation from its inception to date. By continuing to measure the total contributions to the foundation in determining that, for example, an individual's original contribution of perhaps 50 percent of the total corpus of the stock, through time, has been eroded by other contributions to the private foundation such person and his or her descendants should lose their taint as disqualified persons for excess business holding purposes by reason of our suggested moving percentage test. It recognizes the dimunition of influence by a donor to a foundation where his contributions reach a de minimus level.

IV.

Section 2(b) of the bill suggests a new Section 4946(e) permitting a private foundation to rely on a public charity classification of a donee organization for purposes of avoiding the expenditure responsibility rules now contained in Int. Rev. Code Section 4945. The taxable expenditure rules of Int. Rev. Code Section 4945 provide for a 10 percent tax on a grant, made by a private foundation, which fails to conform to the rules of Section 4945(d), including a rule requiring grants to be made to public charities, except under limited circumstances. See. Int. Rev. Code Section 4945(h). Under existing law, if an organization is classified as a private foundation, or loses its public charity classification and lapses into private foundation status, or is an organization described in Sections 170(c)(2), (c)(3), (c)(4), or (c)(5), a private foundation donor, making a grant for charitable or educational purposes, must exercise expenditure responsibility over its grant. Expenditure responsibility is a disjunctive, three-fold test the failure of any provision under the expenditure responsibility rules renders the grant taxable to the foundation, requires the grant to be repaid to the foundation, and starts an evaluation process to determine whether or not the foundation manager may become personally liable for a manager tax for the failure to exercise reasonable cause in the making of a grant. Expenditure responsibility means the foundation's staff must see that the donee expends the grant solely for charitable purposes, the staff must timely obtain complete reports on how the funds are spent and make detailed, separate reports to the Internal Revenue Service on both the foregoing.

Proposed Section 2(b) of the bill, permits a foundation to rely on a determination of public charity classification (regardless of actual classification) unless the original "public" status ruling has been superseded by a notice classifying the donee as a private foundation has been published by the Secretary (presumably in the Internal Revenue Bulletin); reliance on the public record is also not permitted if the foundation was actually aware of a change in the organization's status from public to private. While this provision is helpful, it does not go far enough. We believe that your bill should stimulate thinking on whether or not the expenditure responsibility rules make any sense whatsoever. We don't think the taxable expenditure rules make any sense and we therefore recommend that, as to organizations described in Section 501(c)(3) at least, that they be repealed.

There are three reasons:

First: The Int. Rev. Code Section 4942 requirement that a grant to a private foundation be passed through within a year after received indicates that there is a substantial incentive on the part of the donor foundation, and the donee foundation, to spend or pass through the funds to an uncontrolled organization, for charitable purposes and this process facilitates moving money through a foundation donee into the mainstream of public philanthropy. There is no incentive to hold foundation contributions in another foundation.

Second: The Internal Revenue Service now reviews all organizations applying for exempt status under Section 501(c)(3).

This is required by Int. Rev. Code Section 508(a). This review requires, among other things, certain corporate standards of governance be observed, certain projections as to how the funds are going to be spent, and gives the Internal Revenue Service reviewers, either at the District Director level or at the National Office, an opportunity to discern whether or not the organization is going to truly be charitable or educational. If the Internal Revenue Service perceives there is an absence of adequate information, or that the explanation given in solicitation of questions is not representative of a standard of charitable activity, it denies the exempt status to the applicant and bars the recognition of exemption. This "bars" then any grant to such a charity under Int. Rev. Code Section 4945(d)(5) and acts as a further protection of monies dedicated to philanthropy.

Third: The expenditure responsibility rules are very complex and have caused substantially all major private foundations to avoid any grant for charitable purposes which could in any way invoke these rules. Keeping these rules is to beknight orthodoxy; it also leaves new organizations, with new people and new ideas, in the back roads of benevolence since they can't, absent the certainty of a "public" classification realistically solicit foundation grant money. Not that foundation staff (if it exists at all) is lazy or ill prepared for following the expenditure responsibility rules, it's just that the technical requirements to evaluate good programs is a subtantial burden as it is now to assure that charitable funds are used most effectively and efficiently; adding to that burden, the baggage of a highly legalistic, unpredictably administered provision, requiring the foundation to act as the guarantor of a grant, asks too much of foundation management and staff, if they exist. For those thousands of foundations which rely on volunteers, asking for compliance is inviting disentanglement from their community.

Current laws expect that foundations interested in making a grant to a private foundation (and following Int. Rev. Code Section 4945(h)) keep their lawyer in their pocket. While that's nice for lawyers, it's not nice for philanthropy. This should be rectified.

V.

Section 2(c) of the bill provides a small grant exemption for expenditure responsibility under Section 4945(h), which we again, applaud, but don't think goes far enough for the reasons stated above.

VI.

Your new Section 2(d)(1) of the bill adds Int. Rev. Code Section 4961 dealing with the possible abatement of the first tier tax on self dealing by disqualified persons under

Section 4941, the first tier tax on unexpended payout requirements under Section 4942, the continuation of holding excess business holdings under Section 4943, the making of a jeopardy investment under Section 4944 or the making of a taxable expenditure under Section 4945. This is an altogether sensible approach to the problems that are associated with automatic excise taxes. We are concerned, however, that the standard of "reasonable cause" found in your bill may not be sufficient protection to the private foundation trapped in a Chapter 42 first tier tax situation. We believe it would be appropriate to add to Section 4961, a provision which authorizes the Secretary to issue regulations indicating the extent to which any abatement may be retroactive in effect and, setting entirely separate standard for abatement more liberal than "reasonable cause," to protect foundations under certain circumstances from the unnecessary dilution of funds. This may be necessary in that the "reasonable cause" standard may only be invoked in the event that the first tier taxable event was corrected within the correction period. Not all taxable transactions may be correctable. For example, suppose a private foundation gives funds to an organization which itself is a private foundation and it fails to exercise expenditure responsibility over the grant; the grant is thus taxable. Suppose further that the donee organization spends the donated funds for charitable purposes and these funds cannot be recouped; thus, the correctable event for the taxable transaction can't be fulfilled. It appears to us your abatement provision would not apply in that circumstance. By giving the Secretary authority to issue regulations setting other standards in such circumstances (including where the taxable event may not be fully corrected) it provides the kind of discretion which is most appropriate in this particular area and also protects the public from possible abusive situations.

VII.

While your bill is modestly helpful to the private foundation community, we believe that the Senators should review the facts and fancies propounded in 1969 to see whether or not Section 4943 of the Code, barring a private foundation from holding excess business holdings, is today truly justified. Heritage Foundation analysts called for the abolition of Section 4943 on several occasions, and I renew that call today. We believe the 1969 law sprung from some old Populist or New Deal notion that it is best to separate a family from its wealth through taxation including the wealth which purports to be represented by the "family foundation." No one in their right mind believes that a private foundation is the tool or plaything of a donor or his family. The self dealing rules, the payout rules, the investment and grant rules, the state imposed fiduciary obligations, and the conscience of right thinking American philanthropists, better serves the needs of the public weal today than legislation like Section 4943.

At your request, our office is more than willing to provide a detailed rebuttal of the arguments propounded by the Treasury Department in 1965, and the Congress in 1969, to justify Section 4943. As the Congress is now learning, the 1969 law deformed, rather than reformed, charities and charitable giving. It is time to correct those errors.

STATEMENT OF JAN W. BARAN, ESQ., BAKER & HOSTETLER, WASHINGTON, DC, ON BEHALF OF THE KNIGHT FOUNDATION, AKRON, OH, AND MIAMI, FL

Mr. BARAN. Thank you, Mr. Chairman. I appreciate this opportunity to testify in support of Senate bill 1857, and to address in particular one provision of that bill, which seeks to alleviate present disincentives to contributions of appreciated property such as shares of stock to private foundations. This is sought to be done by increasing the deduction for such contributions to the full value of the appreciated stock, rather than—as under present law—reducing it by 40 percent of the appreciation. In some cases this type of stock donation will turn into a trap for the unwary donor. The reason is that sometimes contributors of stock to a private foundation will discover that the foundation is required under current law in short order to sell their stock. The result may be that the foundation will not realize full value for the stock that has been donated. The sale also may force a change in the management of the business. The forced sale may occur because of the application of section 4943 which requires the divestiture of certain business holdings of private foundations. Accordingly, I urge the committee to consider two changes to section 4943 in the course of action on your bill.

First, we urge the committee to consider increasing the present de minimis rule for holdings of listed stock of private foundations from the current 2 to 10 percent. This proposal is consistent with the provision of the House Tax Reform Act of 1983, H.R. 4170, which permits a full deduction for contributions of stock where the foundation does not hold more than 10 percent of the stock of the business. The 10 percent figure also, Mr. Chairman, is based on a precedent in SEC rules which generally treat more than 10 percent as the line above which stock holders are treated as insiders. This, we believe, will reduce the number of circumstances under which divestiture would be required.

Second, we urge the committee to consider extending the time in which a private foundation would have to divest itself of contributed stock under these circumstances from the current 5 years to 10 years. The House Ways and Means Committee, in H.R. 4170, recognized the need for more time, and we agree with that general objective. The result of extending the time would be to provide for a more orderly disposition of the stock that was required to be divested, and we believe also that it would reduce the amount of time spent by the Service for an activity which will not only be time-consuming but will not generate any additional revenues. The House bill recognizes that 5 years is too short. I also note that the Council on Foundations supports increasing the period from the 5 years to either 10 or 15 years. Thank you very much.

Senator DURENBERGER. Thank you very much.

[The prepared statement follows:]

Statement Before

The Subcommittee on Taxation and Debt Management
Committee on Finance
United States Senate

At Hearings February 24, 1984 On

S. 1857

By

Jan W. Baran
Baker & Hostetler
Washington, D.C.

S. 1857 proposes to remove certain impediments to the effective role of private foundations in philanthropy. In general, we support the purposes of S. 1857.

We believe it is in the national interest and consistent with Congressional policy that impediments to private sector support of philanthropy should be removed wherever possible.

S. 1857 includes amendments to IRC § 170 to alleviate present disincentives to contributions of appreciated property, such as shares of stock, to private foundations. This is to be done by increasing the deduction for such contributions to the full value of the appreciated stock, rather than, as under the present law, reducing it by 40% of the appreciation.

However, this relief is incomplete and, in some cases, will turn into a trap for the unwary donor. The reason is that a contributor of stock to a private foundation may find that the foundation is required in short order to sell the stock. The result may be that the foundation will not realize full value for the stock and the sale may force a change in management of the business. These results can occur because of the application of an existing provision of the Code, Section 4943, requiring divestiture of certain business holdings of private foundations.

There are two very simple and logical ways to mitigate unnecessarily adverse results that may occur in the above situations. These are:

1. *Increase the present de minimis rule for holdings of listed stock by private foundations from 2% to 10%*.

This would be consistent with the provisions of the House "Tax Reform Act of 1983," H.R. 4170, which permits a full deduction for contributions of stock where the foundation does not hold more than 10% of the stock of a business. The 10% figure also is based on precedent in the SEC rules which generally treat more than 10% as the line above which shareholders are treated as insiders.

A related amendment should be made to prevent the *de minimis* amount being reduced by an unintended technical interpretation applicable to charitable remainder trusts and charitable lead trusts. Generally section 4943 does not apply to such trusts. However, the Treasury regulations indicate that such holdings may reduce the *de minimus* amount allowed foundations. The purpose of S. 1857 should not be so frustrated and therefore the holdings of trusts exempt from § 4943 should not be applied to reduce the level of holdings under the *de minimis* rule.

2. *Extend the time within which a private foundation may hold contributed stock to 10 years, in place of the short period of only 5 years under the present law*.

The House Ways and Means Committee, in considering these matters has, in H.R. 4170, recognized the need for more time but has provided for it through an authorization to the IRS to exercise discretion upon a showing of hardship in extreme circumstances. We think this is the wrong approach. It will require foundations to divert efforts into costly and time-consuming presentations to the IRS. It will, at the same time, actually shorten the period in which efforts to sell must be made, say to three years, in order to attempt to make a case to the IRS. Such result is clearly contrary to the demonstrated need for more -- not less -- time to prevent fire sales with loss to charity. Finally, it will impose a burden on the IRS to exercise discretion, which it is ill-equipped to do, and divert significant man hours from the principal function of the Service -- collection of revenue.

The House bill recognizes that five years is too short. The simple and efficient way of handling the problem is to make the period 10 years. The Council on Foundations supports increasing the period to 10 or 15 years.

There are other difficulties in the application of § 4943. However, they involve broader problems than those addressed in S. 1857; and in deference to the sponsors of S. 1857 we shall not burden the Subcommittee with additional recommendations at this time.

Submitted herewith are two explanatory memoranda with legislative drafts, setting forth in further detail the changes which we recommend as necessary in order to make the incentives in S. 1857 meaningful to donors.

2/24/84

Private Foundations -- De Minimis Rule for Holdings of Listed Stock

Present Law: IRC § 4943 places a limit on the holdings of a private foundation in a business enterprise. Generally the limit is the number of shares left, after subtracting from 20% (and in some cases, 35%) of the outstanding stock of a corporation, the holdings of "disqualified persons" (generally substantial contributors, foundation managers, and their family members) with respect to the private foundation. There is, however, a de minimis rule which permits a foundation to hold up to, but not more than, 2% of the stock of the business enterprise. In applying this 2% limit, the holdings of related foundations are aggregated. IRC § 4946(a)(1)(H).

House Bill: H.R. 4170, the "Tax Reform Act of 1983", does not propose to change the de minimis rule. However, section 302 of the Bill would permit a donor of stock to a private foundation to deduct its full value (instead of the value being reduced as under present law by 40% of the appreciation), provided that the stock is listed stock, is a capital asset, and the holdings of the foundation in the particular stock do not exceed 10%. The purpose of this provision is to encourage contributions of listed stock to foundations. Similar encouragement is provided in S. 1857. This purpose would be frustrated by the present divestiture requirements of § 4943.

Explanation of Change: The enclosed Bill would increase the de minimis rule to 10% but only for stock for which, as in H.R. 4170, market quotations are readily available.

The enclosed Bill would not change the present rule requiring aggregation of holdings of related foundations. However, the Bill would make a clarifying amendment with respect to the treatment of certain charitable split-interest trusts. IRC § 4947(b)(3) provides that the § 4943 divestiture requirements with respect to stock in a business enterprise, do not apply to charitable remainder trusts and to certain charitable lead trusts (in the latter case where the charitable interests have an aggregate value of not more than 60%). Treasury regulations have cast doubt on whether in such cases, even though the trusts are not subject to § 4943, their holdings may be required to be aggregated with those of private foundations for purposes of the de minimis rule. In order to consistently apply the provision exempting such trusts from the application of § 4943, the Bill makes clear that such exempted trusts are not to be treated as private foundations for purposes of applying the related foundation rule in computing holdings under the de minimis rule.

To amend the Internal Revenue Code of 1954 to increase the de minimis rule for certain holdings of private foundations.

SECTION 1. DE MINIMIS RULE.

(a) Section 4943(c)(2)(C) of the Internal Revenue Code of 1954 is amended to read as follows:

"(C) DE MINIMIS RULE. -- A private foundation shall not be treated as having excess business holdings in any corporation in which it (together with all other private foundations which are described in section 4946(a)(1)(H)) owns not more than --

"(i) 2 percent of the voting stock and not more than 2 percent in value of all outstanding shares of all classes of stock, or

"(ii) 10 percent of the voting stock and not more than 10 percent in value of all outstanding shares of all classes of stock, if with respect to the stock so owned market quotations are readily available on an established securities market."

(b) Section 4943(d) of the Internal Revenue Code of 1954 is amended by adding the following new paragraph at the end thereof:

"(4) Certain trusts. -- In applying the de minimis rule of subsection (c)(2)(C), a trust to which sections 4943 and 4944 do not apply by reason of section 4947(b)(3) shall not be treated as a private foundation described in section 4946(a)(1)(H)."

SECTION 2. EFFECTIVE DATE

The Amendments made by Section 1 shall be effective for taxable years beginning after December 31, 1983.

2/24/84

PRIVATE FOUNDATIONS - EXCESS BUSINESS HOLDINGS RESULTING FROM GIFTS OR BEQUESTS

Present Law: Section 4943 of the Internal Revenue Code imposes a penalty excise tax on business holdings of private foundations in excess of certain limits. Basically, the maximum permitted holding by a private foundation in an incorporated business is 20 percent of the voting stock, reduced by the holdings of disqualified persons with respect to the foundation. Foundations which receive holdings by gift or bequest after May 26, 1969 are given only five years in which to dispose of the "excess" holding. Experience has shown that the five-year period is too short; it does not take into account difficulties in marketing complex holdings; and it causes sales to be forced in a short period of time, possibly at some sacrifice in the price realized for charity.

Prior Actions; S. 562; H.R. 4170: Hearings have been held on S. 562 which would provide the Internal Revenue Service with discretionary authority to grant an extension for an additional five years in which to dispose of certain business holdings acquired by a foundation by gift or bequest. H.R. 4170, the "Tax Reform Act of 1983," approved by the House Ways and Means Committee also contains a provision (Section 308) granting the Service similar discretion in certain cases.

Both S. 562 and H.R. 4170 recognize the undue burden created by the present five-year period. However, both bills would have the practical effect of shortening the period for most foundations. Foundations would, to protect themselves, have to file for an extension early in the initial period. A foundation would not be assured of an extension or even certain it would have an answer before the end of the initial period. Thus, in reality, the foundation would be required to seek a disposition on the assumption that the extension would not be granted. This would create more fire sales rather than fewer.

Further, both bills impose an undue burden of discretionary authority in the IRS. The IRS has no special expertise in this area. It will require valuable manpower to be used for a nonrevenue purpose. The very fact that there is discretion in the IRS to grant relief will cause practically every foundation to apply for more time on the ground that there is a fiduciary duty to do so. This will turn a simple problem into an administrative nightmare.

Explanation of Proposal: An alternative is provided by the attached bill provision, which would extend the statutory period from five to ten years. This has the advantage of simplicity and clearly provides a reasonable period of time.

This change is also consistent with the policy of increasing private support for philanthropy; it will modify an impediment under the present law to future gifts and bequests of stock. This is a necessary step to implement proposals to encourage greater charitable giving as contained in S. 1857 and H.R. 4170 (Section 302).

To amend the Internal Revenue Code of 1954 to extend the transitional period for gifts and bequests of stock to private foundations.

SECTION . PERIOD TO DISPOSE OF CERTAIN GIFTS AND BEQUESTS TO PRIVATE FOUNDATIONS.

Subparagraph (A) of Section 4943(c)(6) of the Internal Revenue Code of 1954 (relating to taxes on excess business holdings) is amended by striking out the phrase "5-year period" and inserting in lieu thereof "10-year period."

SECTION . EFFECTIVE DATE.

The amendment made by Section (1) shall apply to, and be effective as of the beginning of, any 5-year period heretofore described in Section 4943(c)(6) of the Internal Revenue Code of 1954 which ends after ______________ ____, 1983,* and any period described in Section 4943(c)(6) beginning after said date.

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*This date has been left blank to indicate that a decision needs to be made as to the application of the relief provision to Foundations whose 5-year transitional period expired in 1983, such as the McArthur Foundation. Alternatively there can be substituted for the date, the following: "the date of enactment of this Act."

STATEMENT OF ROGER WELLINGTON, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, AUGAT, INC., MANSFIELD, MA, ON BEHALF OF AMERICAN ELECTRONICS ASSOCIATION, WASHINGTON, DC

Mr. WELLINGTON. Thank you. I am Roger Wellington, and I am chairman and chief executive officer of Augat, a New England based manufacturer of international components for the electronics industry. In the last decade, we have grown from a very small company with two plants employing 350 people to, today, 3,500 employees with 26 plants in the United States. Today, I am testifying on behalf of the American Electronics Association, which represents over 2,400 companies from start-ups to the largest companies in the industry. Seventy-two percent of AEA's members employ fewer than 200 people. Nevertheless, member companies account for $140 billion of sales or 63 percent of worldwide sales of the U.S.-based electronics industry.

High technology is inseparable from high levels of R&D, national security, employment growth, and exports and productivity growth. The high technology sectors accounted for 75 percent of job creation from 1955 to 1979 in all manufacture 1982, a trade surplus of over $25 billion, and a growth of labor productivity six times that of the average U.S. business during the 1970's. High tech companies depend on R&D and devote a huge share of their activities to R&D.

In the 1970's these companies generated more than 60 percent of all private U.S. R&D, although they represented only 13 percent of the value of manufactured products shipments. Nevertheless, Federal income tax burdens on high tech electronics companies in 1982 were 40 to 75 percent higher than for the average U.S. corporation. This has been confirmed by separate studies by the National Science Foundation. In my own company, the figure is almost 100 percent higher. The R&D tax credit is an effective and efficient way to alleviate these disproportionate relationships. In my company, the tax credits were a material factor in our decision to persist and increase our R&D expenditures in 1981, 1982, and 1983—years of severe profit pressure—years of the period when there was motivation in the financial community to look to the short term for profit performance. Nevertheless, in these 3 years we invested more than $7.5 million for R&D in the field of high-density multilayer technical ceramics—a field currently dominated by the Japanese yet vital to the future of the American electronics industry, and to programs of our Defense Department. Without R&D credits, we would have had to reduce these investments. Therefore, it is clear that the R&D tax credit needs to be extended and clarified, as I state in my prepared statement.

In conclusion, the Government cannot force technological leadership, but it can foster and nuture it through a national commitment to national research and an educational system that provides for the education and training of adequate numbers of engineering and scientific human capital. The electronics industry has been instrumental in helping to perfect the existing credit and in encouraging university research. The electronics industry is interested in clean legislation. We want to accomplish this intended legislation by minimizing the potential for abuse.

I hope that the staffs of the committee will have an opportunity to read the full testimony of my statement to back up this verbal testimony. Thank you.

Senator CHAFEE. Thank you, Mr. Wellington. We appreciate your fine statement.

[The prepared statement follows:]

# STATEMENT OF ROGER WELLINGTON
for the American Electronics Association
before the Senate Committee on Finance
Subcommittee on Taxation and Debt Management
February 24, 1984

MR. CHAIRMAN, and distinguished members of this Committee. It is my honor and privilege to address this committee today on behalf of the American Electronics Association.

My name is Roger Wellington, and I am Chairman of the Board and Chief Executive Officer of Augat, Inc., a Massachusetts based manufacturer and designer of a broad range of electromechanical interconnection products for the electronics industry.

In 1972 Augat was an early member of the emerging New England based electronics industry with Annual sales of $14,000,000, 350 employees, and two plants in Attleboro and Mashpee, Massachusetts. In the ensuing decade, the company's revenues have grown fourteen-fold with 28 plants, employing 3,500 people in Massachusetts, Rhode Island, New York, New Jersey, Florida, Illinois, Texas, California and Switzerland. During that time, Augat wholly-owned marketing subsidiaries have been established in Great Britain, France, Germany, Sweden, Italy, Switzerland, Canada and Japan.

I am appearing before you today on behalf of the American Electronics Association. AEA now represents over 2,400 member companies nationwide. The Association encompasses all segments of the electronics industry; including manufacturers and suppliers of computers and peripherals, semiconductors and other components, telecommunications equipment, defense systems and products, instruments, software, research and office systems. The AEA membership includes companies of all sizes, from "start-ups" to the largest companies in the industry. But 70 percent are small companies employing fewer than 200 people. Together, AEA member companies account for $140 billion in sales--60 percent of worldwide sales of the U.S. based electronics industry.

In my testimony today, I intend to demonstrate the need for a strong national commitment to research and development to meet the challenge of continued productivity growth in the economy in the face of increasing international competition. S.2165 recognizes this relationship between R&D and productivity, as well as the pivotal role played by high technology industries in meeting this challenge.

HIGH TECHNOLOGY INDUSTRIES IN THE U.S

National Security:

National security depends upon the technology-intensive industries both for sophisticated items essential to modern weapons superiority, and for a strong and flexible industrial capability for future contingencies.

Employment:

Electronics manufacturers, for example, will continue to expand and create many new jobs directly within the industry, if they can secure enough engineers and other scientific and technical personnel. A recent AEA study covering 615 company respondents projects growth in both technical and non-technical electronics employment of 49 percent through 1987. The Bureau of Labor Statistics, historically conservative in predicting trends in high-tech sectors, projects a similar pattern. By 1990 the fastest growing employment sectors in this industry will be: office equipment, computers, peripheral equipment and medical systems. A 1982 study by the Joint Economic Committee reported that high technology industries accounted for 75 percent of the growth in jobs in the entire manufacturing sector from 1955 to 1979.[4]

Exports:

Research and development costs for high technology companies to develop new generations of products are sufficiently high that each generation of products must be sold in the broadest possible marketplace to generate sufficient revenues to continue funding future product development.

This need to export is amplified by the fact that many high technology products have generation lives of as little of as two years. Thus, U.S. high technology companies must sell their products competitively in foreign markets.

Balance of Trade:

In 1982, according to Department of Commerce statistics, high technology industries accounted for a $25.1 billion international trade surplus. For the first three months of 1983, the latest period for which data is available, high technology industries had accumulated a $6.54 billion surplus.

Capital Spending:

The Department of Commerce states that high technology companies are increasing capital expenditures at a more rapid rate than traditional industries. This fact results largely from the rapid rate of overall growth occurring throughout high technology industries.

Productivity Growth:

The growth rate of high technology industries has been two times that of total industrial output in the United States. The electronics and information technology industry has acted as a high tech "economic right spot," experiencing a phenomenal 17 percent annual growth over the last decade. Currently, it ranks tenth among U.S. industry categories. But it is expected to rank second by the end of the century. During the 1970's, average labor productivity of the industries in the high technology category grew six times faster than that of total U.S. business,[2] while the products they manufacture are used to generate substantial productivity improvements in all other sectors of the economy.

HIGH TECHNOLOGY DEPENDS ON RESEARCH AND DEVELOPMENT

High technology companies devote a huge share of their overall activities to research and development. Indeed, most must devote 12 to 16 percent of their sales revenues to R&D, while the industry average in the U.S. is less than half that amount.

During the 1970's, these companies generated more than 60 percent of the total private R&D in the U.S., although they represented only 13 percent of the value of manufacturing product shipment.[3]

R&D IN THE U.S.

The National Science Foundation estimates total R&D spending in the United States during 1983 at $86.5 billion, $44.3 billion of which is privately funded. The Federal Government spent $39.6 billion in 1983 and universities and colleges spent about $1.6 billion, while other nonprofit institutions spent around $1.0 billion.[4]

Sustained R&D, both private and government-sponsored, is essential to productivity growth in the U.S. economy. Two recent independent studies estimated that as much as ten percent of the productivity slowdown during the 1960s is attributable to the reduced amount of R&D spending of that same period.[5] Other factors aggregately accounted for less than half of the total economic productivity reduction.

It is clear, therefore, that failure to sustain growth in research and development has direct ramifications on the ability of the United States to sustain productivity growth.

THE INTERNATIONAL THREAT

The economic benefits of research and development activities by high technology industries are no secret of the United States alone. In fact, our international competitors have established an elaborate set of government policies aimed directly at promoting high technology growth.

Japan, for example, provides companies with R&D which loans are not required to be paid back until and unless the loan-funded R&D activity produces a revenue generating product. If the government funded R&D fails to result in a commercially viable product, the loan essentially becomes a grant.

In Germany, an R&D tax credit is a permanent feature of German law. Both Germany and Japan, furthermore, levy no tax at all on capital gains, thereby providing even greater incentives, or, conversely, not providing a disincentive, for spending on risk ventures.

In absolute dollars, the United States has supported the largest amount of R&D among its key competitors--Japan, West Germany, and France. Since 1964, however, each of these other countries increased R&D funding at a significantly more rapid rate than the U.S. Real growth of R&D expenditures between 1970 and 1979 has been approximately 15 percent for the United State, 80 percent for Japan, 45 percent for West Germany, and 30 percent for France.[6]

A recent article in the Wall Street Journal illustrates that extent of our foreign competition. The article stated that "a third of all integrated circuits" are made in Japan. In response to this international competition, many U.S. companies "are trying to maintain a technological edge by spending more on research and development."[7]

THE DOMESTIC THREAT

In January, a group of 20 high technology electronics companies concluded a year-long study of the corporate and individual tax systems, as they affect U.S. high technology electronics companies and their investors. The report, "High Technology Tax Policies for the 1980s", by the Ad Hoc Electronics Tax Group, concludes that while the Economic Recovery Tax Act of 1981 (ERTA) "substantially reduced expected levels of taxes paid to the Federal Government...with respect to corporate taxes, the tax reduction has not been equally shared amount taxpayers."[8] Indeed, the report points out that the most recent studies in the field indicate that "Federal income tax burdens on high technology electronics companies in 1982 were from 40 to 75 percent higher than for the average U.S. corporation."[9] These conclusions were corroborated by two separate studies conducted by the National Science Foundation.

THE NEED FOR AN R&D TAX CREDIT

Virtually all of the evidence in the area points to the R&D tax credit as an effective and efficient means by which to alleviate some of the burden high technology industries face under proportionately higher effective tax rates.

In the case of high technology industries, the R&D tax credit provides an incentive, or at a minimum reduces a significant disincentive, to further invest in the one area which is most important to the growth of high technology and productivity in the United States: research and development.

Obviously, it is in the interest of the United States to foster the process of innovation as the means by which our nation can maintain its technological leadership in an increasingly competitive world economy. By promoting productivity through R&D, growth in output is generated and without the kinds of economic pressures which risk renewed inflation. The Office of Technology Assessment (OTA) recently reached the same conclusions.

Congress essentially recognized both the need for and the economic capacity to absorb increased R&D spending when it passed the R&D tax credit provisions of ERTA in 1981.

THE EFFECTIVENESS OF THE R&D TAX CREDIT

Evidence to date indicates that the credit is responsible for increased R&D activity across-the-broad, especially in those marginal areas which would not otherwise have been funded without such an incentive as the tax credit.

In testimony last year before the House Committee on Ways and Means, Mr. John Colbert, Treasurer of M/A-Com, Inc., of Burlington, Massachusetts, described to the Committee his experience with the R&D tax credit:

> The credit...has become embedded in the thinking of our company's senior management, and has had the effect of heightening the corporate priority for research...Since the credit was enacted, M/A-Com has made the decision to intensify its research in gallium arsenide (GaAs)...Within the last year, we have made the commitment to acquire a $20 million facility to house this research and the manufacturing that results, and we will, or course, equip and populate it to the tune of many millions more. The presence of the credit made it much easier for us to commit to this level of effort, even though it represents an outlay far in excess of any we could expect to recover from the credit for years to come.
>
> ...By participating vigorously in an area of international technological competition in which the outcome is not assured, we multiply our risk. We believe that this is precisely what you wanted us to do when you enacted the credit, and we are doing it.

THE 1981 R&D TAX CREDIT NEEDS TO BE IMPROVED AND EXTENDED

Despite the need for the R&D tax credit and its demonstrated effectiveness in promoting increased R&D tax credit and its demonstrated effectiveness in promoting increased R&D spending in the United States, its implementation has brought to light several problems, which S.2165 solves.

In some areas, the existing R&D tax credit is applied too narrowly. Start-up corporations, for example, whose operations are almost entirely R&D oriented and whose potential for employment opportunities is tremendous, cannot now qualify for the R&D tax credit. S.2165 would solve this oversight by making legitimate start-up corporations eligible for the credit.

In other areas, the present credit is applied too broadly, thereby allowing certain activities to qualify for the credit despite evidence which suggests that such activities never were intended by Congress to qualify.

Through the definition of qualifying R&D, S.2165 limits eligibility of the credit in four ways. The functional requirement for business items eliminates the entire category of style, cosmetic taste and seasonal design improvements often undertaken purely for marketing purposes. The experimentation requirement eliminates from qualification under the credit a variety of low risk activities whose result is readily discernible prior to undertaking "research." The definition further excludes post-production activities from eligibility under the credit, thereby preventing a taxpayer from claiming the credit for activities no longer associated with product development. Finally, S.2165 limits the eligibility of software developed by the taxpayer for internal use only to such cases where the internal software is truly innovative.

THE NEED TO EXTEND THE R&D TAX CREDIT IN 1984

There are three principle reasons dictating the need to enact S.2165 this year.

First, most high technology companies plan their R&D activities on a three to five year cycle. This fact means that for most companies, the expiration date already is a significant factor in making decisions as to how many resources can be made available for corporate research.

Second, the doubt about the future of the credit effectively means that it becomes unavailable for many corporations, for planning purposes. This, in turn, further exacerbates the already high effective tax burden on high technology industries.

The third reason for enacting S.2165 this year involves a matter of political equity. Of all of the major tax expenditures enacted under ERTA and before, only the R&D tax credit is scheduled to sunset in

1985. We are concerned that the R&D credit will not be considered on an equal footing in 1985 with the other major tax provisions of the U.S. Code, when Congress studies deficit reduction alternatives.

NEED FOR INCREASED INDUSTRIAL BASIC RESEARCH

So far, I have focused my comments on the portion of S.2165 which pertains to applied corporate research activities. This legislation, however, represents a comprehensive approach to maintaining technological leadership in the United States, not only in the near future, but in the medium and long term future of our nation, too. The challenge of meeting the medium, and long-term needs of continued U.S. technological leadership is addressed in the bill's education provisions. These provisions are aimed at increasing the stock of human capital needed to continue our technological development.

Basic research conducted by universities results in a transfer of technology throughout the economy. In-house research by a company results primarily in an individual company's economic success. Universities, through the use of basic research dollars, have served as primary incubators for new technology creation. The existence of Silicon Valley firms in California and Route 128 companies in Massachusetts testify to innovation genesis from universities.

While U.S. government dollars for basic research between 1967 and 1977 remained fairly constant, Japan increased its spending by 60 percent, West Germany by 50 percent, and France by 16 percent. Most of these foreign dollars are targeted in areas with economic and commercial significance. In the U.S. an unhealthy 50 percent decline of industry basic research dollars going to universities has taken place since 1960--from 8 percent to 4 percent.

The decline in R&D industry dollars to educational institutions has also contributed significantly to the present shortage of some 2,000 engineering faculty. Unlike a decade or so earlier, our country's best and brightest students are now opting for industry employment, not only because of higher salaries but because academia no longer offers attractive and interesting research opportunities.

S.2165 provides a means to encourage increased industry R&D with universities. It creates a new credit equal to 25 percent of a corporation's payment to universities and other qualified organizations for basic research which exceed a fixed, historical maintenance of effort floor. This maintenance of effort requirement-the excess of a company's average 1981 through 1983 R&D university payments or 1 percent of its total R&D budgets, whichever is larger--does not penalize those who increased their R&D contracts since enactment of ERIA. Rather, it encourages all companies to augment their efforts.

Appropriately, the Act makes eligible for the R&D credit depreciation of research equipment allowable under section 167 (standard depreciation) or section 168 (ACRS). To ensure that this research equipment depreciation provision does not imbalance a company's decision toward in-house R&D, the Act includes a 10 percent increase--from 65 percent to 75 percent--for contract research. Under current law, for example, a company with a full tax liability can deduct 45 percent of its R&D expenditures. The new credit under the Act increases this deduction beyond the maintenance of effort by 18.75 percent. This will be effective in encouraging companies to contract with universities by requiring them to pay only 36.25 cents for every dollar expended.

HIGH TECHNOLOGY'S NEED FOR TECHNICAL HUMAN RESOURCES

High technology's ability to fulfill its promise as a creator of new markets and as a partner with traditional industries is predicated on the availability of highly skilled human resources, specifically electrical engineers (EEs) and computer engineers (CEs) and technicians.

AEA's report "Technical Employment Projections: 1983-1987" indicates a need by 1987 for 63.1 percent more electronic technicians, 65.5 percent more electrical engineers, 115 percent more computer (software) engineers, 102.5 percent more computer analyst/programmers, and 107 percent additional electronic engineering technologists. And in spite of what one reads about mechanization, there continues to be a healthy projected need for 63.7 percent more assembers. (See Attachment A.)

Extrapolating the projected needs for electrical and computer engineers to the entire U.S. electronics industry and juxtaposing them against the projected supply from U.S. colleges and universities, we get a trend-shortfall of upwards of 20,000 a year. Even assuming no defense contracts, annual combined electrical and computer engineer shortfall is projected to be over 16,000. The major pool of people for these jobs will by necessity have to come from U.S. colleges and universities.

The need for electrical and computer engineers, in spite of recent economic conditions, remains significant, as evidenced by unemployment figures. In 1981, unemployment for computer specialists and electrical engineers stood at a scant 1 percent, virtually full employment (See Attachment B). Yet, in spite of the enormous growth of the electronics and information technology industries over the last decade, the production of electrical engineering bachelor degrees has increased by only 29 percent.

PROBLEM: A LACK OF FACULTY AND EQUIPMENT

Too few faculty and poorly equipped engineering and scientific teaching laboratories in this country's two and four year colleges and postsecondary vo-tech schools are blocking admittance of new students and lowering the quality of learning for those lucky enough to find classroom space.

AEA's Blue Ribbon Committee on Engineering Education estimated that two out of every three qualified applicants to undergraduate electrical/electronic and computer engineering programs cannot presently gain admittance.

Students at the University of Illinois, Champaign-Urbana, for example, must score at or above the 97 percentile on entrance exams to be admitted to engineering programs. Once these capable engineering students are turned away, they are generally lost to other disciplines.

Currently a 33 percent technical and engineering faculty vacancy rate exists, making it likely that thousands of potential engineering students will have to continue on through the non-technical major pipeline. Neither the industry nor the country can afford to lose them. This is especially true when one considers demographics which indicate that for every four 16 year olds we have today, we will have only three by 1990. And more of these three will be females and minorities--two groups that have historically avoided courses and careers in math, science, and engineering.

Faculty vacancies approach 50 percent in some high tech speciality areas, such as solid state, digital systems, and computer engineering. This country needs 1,000 new engineering faculty each year through 1990 just to remain in a steady state. Yet, we are producing only 450 new professors annually.

While many students want to study undergraduate engineering, few U.S. citizens want to continue on for doctoral degrees in order to teach. Two factors serve as primary disincentives: low academic salaries compared with those offered by industry, and inadequate teaching and research labs. As a result, the student doctoral pool from which faculty tranditionally are drawn is shrinking. Electrical engineering doctoral degrees have dropped by 39 percent--from 599 Ph.D/EEs in 1971 to 542 Ph.D/EEs in 1982. Computer engineering doctoral degrees awarded in 1982 were lower than those given six years ago and actually declined 19 percent over 1981--from 171 Ph.D/EEs in 1981 to 129 Ph.D/EEs in 1982.

Fifty percent of the doctorates awarded went to foreign students, two-thirds of whom are likely to return to their homelands after graduation. Currently, most applicants for entry-level engineering faculty positions are foreign-born nationals. Twenty-five percent of all junior engineering faculty in the U.S. today received their bachelor degrees from non-U.S. universities.

NEED TO REFURBISH TEACHING LABORATORIES

To bring instructional labs up to needs of today's students would require about $2 billion.[10] This sorry situation is a result of steadily declining educational budgets for capital expenditures.

For example, in the California State University system, funding for replacement of instructional equipment in engineering has been less than 2 percent annually of its replacement costs, requiring a 59-year life cycle to complete the replacement process. In Texas, State Senator Caperton recently introduced a bill to set up a $57 million fund for the purchase of engineering equipment to revitalize the State's engineering colleges and universities. Because technology is changing so rapidly within the industry--robotics, microelectronics, computer aided design, optics, spectrographics--many University laboratories are becoming so obsolescent that the technological future of the country is at risk.

THE R&D DEDUCTION STIMULATES RESEARCH EQUIPMENT DONATIONS

An annual Council for Financial Aid to Education (CFAE) survey shows a 56.5 percent increase in dollar value or a 4 percent increase of all corporate funded university departmental research grants between 1980 and 1982. In 1980, CFAE reports 19 percent or $64.7 million of all gifts went towards departmental research; in 1982--after the passage of ERTA--24 percent or $114.6 million went for such research. According to CFAE, the types of corporate gifts shifted between 1981 and 1982 towards increased donations of company products: of $1.2 billion donated, a record $96 million were in product gifts. Although CFAE did not specifically ask in its survey questionnaire why the increases in research dollars and equipment occured, it seems logical to infer that the degree and kind of contributions were influenced by availability of the federal tax incentive. The latest annual Conference Board survey substantiates the CFAE trend.[11]

A 1984 AEA survey of six universities in the three state of Oregon, Texas, and Colorado determined that donations for engineering research equipment increased two and a half times between 1982 and 1983--from a total fo $944,762 in 1982 to $3,302,370 in 1983. A breakdown by states is as follows:

RESEARCH EQUIPMENT DONATIONS

STATE	1982	1983	PERCENTAGE INCREASE
Colorado (1 university)	$165,000	$330,000	100%
Texas (2 universities)	$129,262	$1,565,370	1111%
Oregon (3 universities)	$650,500	$1,407,000	116%

One university in Oregon which advertised the R&D tax deduction widely to companies experienced a 12-fold increase in donations-- from $24,500 in 1982 to $314,000 in 1983.

One university in Oregon which advertised the R&D tax deduction widely to companies experienced a 12-fold increase in donations--from $24,500 in 1982 to $314,000 in 1983.

The inclusion of customer-owned equipment in S.2165 will be especially helpful to colleges where teaching labs commonly contain 20 to 30 year old equipment and instrumentation to teach new "growth technologies" is almost non-existent. As the president of one Fortune 500 company remarked after a recent tour of a university engineering department, "The only time my engineers will see equipment of this type is when they tour the Smithsonian."

NEED TO INCLUDE DEDUCTIONS FOR SERVICE AND MAINTENANCE

S.2165 provides that maintenance, repair, reconditioning, or similar services ordinarily provided by a contributor in a commercial sale or equipment lease shall be considered "eligible services." This shows an enlightened perspective by the authors on the growing impact limited educational budgets are having on institutions' ability to accept equipment donations.

An AEA survey of electrical engineering department chairmen points to the severity of too little maintenance and service contract money:

> Thirty electrical engineering chairmen estimated the amount needed to service and repair electrical and computer engineering instructional equipment to a point usable for an entire academic year at $1,481,940 or $51,101 per university (range $1,000-$173,000)--a shortfall in funds needed for service and repair at $20,620 per institution.
>
> Eleven out of 28 chairmen, or 39 percent, indicated they have instructional equipment currently sitting idle because of a lack of service and repair funds.

This Act's inclusion of normal maintenance and repair contracts as eligible services will help ensure that universities may more readily accept donations and that equipment is immediately usable and serviceable for a reasonable period of time.

NEED TO INCLUDE COMMUNITY COLLEGES AND POSTSECONDARY VO-TECH SCHOOLS

The problems of our four-year institutions also exist at our U.S. community colleges and postsecondary vo-tech schools: too few qualified instructors and outdated laboratory equipment but an abundance of interested students.

The Act's inclusion of community colleges and postsecondary vo-tech schools as eligible recipients in math, engineering, and physical and biological science subject areas underscores the recognition by its authors of the country's need for trained technicians and service personnel. These institutions not only "feed" into four-year colleges and universities, requiring parallel kinds of quality instructional capability, but they are commonly the first and last training grounds for the majority of entry-level employment, retraining, and upgrading for most of our country's workers.

NEED TO CLARIFY TAX EXCLUSION FOR FORGIVABLE FACULTY DEVELOPMENT LOANS

Private industry is currently spearheading a donation program to fund, and thereby make more attractive, graduate education for those who are interested in teaching careers. Forward-looking students however view future tax indebtedness as a negative feature when offered financial aid to pursue a doctoral degree to become a professor.

One Stanford University candidate for an AEA company-sponsored Faculty Development Fellowship-Loan found that with income averaging he would possibly incur a future tax liability from the forgivable debt during his first three years of teaching of an additional $10,445; without income averaging it would be $14,571.

Efforts by individuals and companies to build a pool of scientific and engineering faculty will be enhanced under the Act's intention to clarify exclusion of these loans and grants from tax liability.

PRIVATE INDUSTRY WILLING TO HELP

The American Electronics Association has had an active national program to assist engineering education and thereby help increase the availability of qualified scientific, engineering, and technical personnel since 1981. Key elements of its efforts include:

> A standard for each company to provide 2 percent of its R&D budget to engineering education.
>
> AEA industry committees to raise funds and work with state legislatures and universities to improve technical education budgets and faculty salaries and improve programs.
>
> AEA's Electronics Education Foundation for U.S. citizens to get Ph.Ds and become engineering teachers and for faculty grants to help universities retain professors.

State and federal legislation, primarily supporting that which encourages partnerships between industry, education, and government through tax incentives and other jointly leveraged measures.

ADMINISTRATION SUPPORT

Most of the provisions of S.2165 have been drafted within the framework of active consultation between industry and the Treasury Department. Indeed, many of the "loophole closers," particularly in the definition of qualifying R&D were written at the suggestion of Treasury.

CONCLUSION

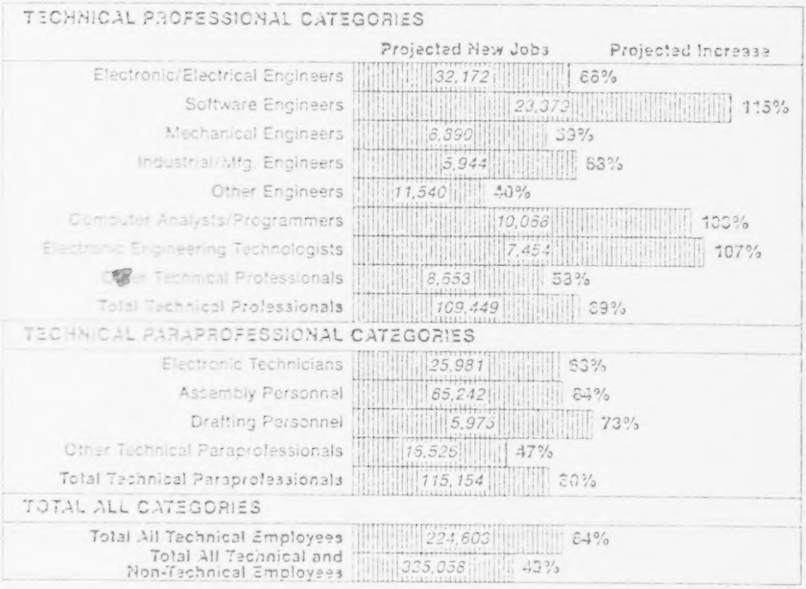
We believe the federal government cannot *force* technological leadership. Government can, however, *foster* it through a strong national commitment to basic research and the creation of an educational system that provides for the education and training of adequate numbers of engineering and scientific human capital.

We are pleased to have the opportunity to express our strong support for S.2165. This bill and its companion in the House, H.R.4475, constitute examples of cornerstone legislation that will help restore this country's technological and economic leadership. We support an underlying principle in this legislation of government-industry partnerships which provide our schools and colleges with a financial multiple of the benefits that could be expected from a direct expenditure of the same amount of public funds. Furthermore, it does so with a minimum of the overhead and bureaucratic costs involved in federal grant programs.

The electronics industry, which has been instrumental in helping to perfect the existing credit, and university research and equipment donation provisions is vitally interested in "clean" legislation. High technology industries want to accomplish the intended objective of this legislation while minimizing the potential for abuse. High technology industries are not looking to "make money" from this legislation. They are looking to make technology.

American Electronics Association

ATTACHMENT A



UNITED STATES
PROJECTED JOB GROWTH 1983-1987

615 facilities reporting

From "Technical Employment Projections 1983-1987," American Electronics Association, 1983.

ATTACHMENT B

UNEMPLOYMENT RATES OF THE SCIENCE AND ENGINEERING LABOR FORCE: 1972—1981

	1972	1973	1974	1976	1978	1980	1981
TOTAL ALL FIELDS	1.9	0.9	1.7	3.0	1.4	1.1	1.1
ENGINEERS	2.2	0.9	1.3	2.1	1.3	1.0	1.0
ASTRO/AERO					0.6	1.1	1.0
CHEMICAL					1.1	1.1	1.1
CIVIL					3.2	1.2	1.0
ELECTRICAL/ELECTRO					0.5	1.0	1.0
MECHANICAL					0.6	1.0	1.0
OTHER					1.3	1.0	1.0
PHYSICAL SCIENTISTS	1.8	0.7	2.5	4.2	2.0	1.7	1.6
COMPUTER SPECIALISTS	1.4	0.5	1.0	0.6	0.3	1.0	1.0

SOURCE: NATIONAL SCIENCE FOUNDATION AND
BUREAU OF LABOR STATISTICS.

SRS 82-1540
7-23-82

FOOTNOTES

1. "Location of High Technology Firms and Regional Economic Development", Joint Economic Committee, Congress of the United States, June 1, 1983, p.6.

2. An Assessment of U.S. Competitiveness in High Technology Industries, U.S. Department of Commerce, International Trade Administration, February 1983, p.3.

3. *Ibid*., p.4.

4. "Industrial R&D Spending: a Recession-Proof Phenomenon This Time Around," Machinery & Allied Products Institute, December, 1983, p.3.

5. *Ibid*., p.10.

6. "An Assessment of U.S. Competitiveness in High Technology Industries," figure 4.[illegible] *op cit*. p.22.

7. Richard Shaffer, "Japanese Seek Increased Sales in Circuit Making Machinery", WSJ, 2/10/84, p.29.)

8. Ad Hoc Electronics Tax Group, "High Technology Tax Policies for the 1980s", Executive Summary, January, 1984, p.1.)

9. "America's Competitive Challenge," A Report to the President of the United States, Business-Higher Education Forum, Washington, D.C., April 1983, p.4.

10. "Engineering Education Problems: The Laboratory Equipment Factor," National Society of Professional Engineers, Washington, D.C., September, 1982.

11. "Corporations: More Non-Cash Gifts Included in Growing Contributions for Charitable Causes," *Daily Report for Executives*, Bureau of National Affairs, Inc., Washington, D.C., November 25, 1983, pp. A-15 - A-16.

Senator CHAFEE. I think it could be helpful if the witnesses could address the concerns that were raised by Mr. Chapoton, which you all heard, namely, the Treasury Department's desire to extend this only for 3 years and the specific concerns that he raised in his testimony. If you don't bring those out in your testimony, then I think we may be asking you those questions. I don't think anybody here on the committee opposes the concerns that you have of the need for an extension. We have got to look at Treasury's concerns. Why don't you go next, Mr. Harris?

STATEMENT OF RICHARD D. HARRIS, MANAGER, INFORMATION MANAGEMENT POLICY AND PRODUCTIVITY, XEROX CORP., ROCHESTER, NY, ON BEHALF OF THE ROCHESTER TAX COUNCIL

Mr. HARRIS. Thank you, Mr. Chairman. My name is Richard Harris. I am the manager of information management policy and productivity of the Xerox Corp., and I am testifying today on behalf of the Rochester Tax Council, representing major employees in the Rochester, NY area, including Bausch & Lomb, Kodak, and Xerox. I also represent for the purpose of this issue IBM, Sperry and Amdahl. I am accompanied by Mr. Philip Morrison of Ivins, Phillips & Barker, chartered.

I am not a tax lawyer, an economist, a chief executive officer or professional lobbyist. I speak to you today in my capacity as a computer and data management specialist. I will not speak to the general benefits of the R&D credit nor the desire to make it permanent, but I would like to speak about a special type of R&D conducted by Xerox and others for which we think the credit was intended.

Last May and again today, Secretary Chapoton testified that the goal of R&D credit was to encourage risky research, productivity enhancing innovation, and so forth. Defining those terms is a problem. What is productivity-enhancing innovation? How do we define risk? In answering these questions, I would like to make two points. First, that productivity-enhancing innovation is not found only on the assembly line. And second that productivity-enhancing innovation is not necessarily connected with a product.

We have found in recent years in industry that to improve productivity and become more competitive in the marketplace we must also look to the productivity of executives, draftsmen, professionals, accountants, and clerical personnel. Indeed, in these areas, we probably have more opportunity for productivity improvements than on the assembly line today. Moreover, improving productivity in these areas does not depend just upon computers or other business machines. It depends on innovative business procedures and practices which themselves are inevitably supported by software. It is this innovative utilization of computer hardware by virtue of innovative software where we get the real productivity benefit. Any large company will need some specialized data processing systems, including specialized software to support their operations which are not necessarily available for purchase in the marketplace.

It is the cost of developing this innovative and special software which we feel must necessarily be qualified under the R&D tax credit. In my written statement on page 7, you will see a description of an actual internal-use software development project that Xerox has undertaken which we hope you will feel is representative of the risk and innovation involved. We understand that the IRS will need guidelines to help them identify what these costs are. We also understand the Treasury's concerns that "mundane" software changes not qualify for the credit. The standards that we have proposed that are outlined in my written submission—standards that we have worked with the legislative staffs and Treasury on—will help to identify what these unique software investments are. Thank you for this opportunity to testify.

Senator CHAFEE. Thank you. Mr. Langdon.

[The prepared statement follows:]

STATEMENT OF RICHARD D. HARRIS, MANAGER, INFORMATION MANAGEMENT POLICY AND PRODUCTIVITY, XEROX CORP., ROCHESTER, NY, ACCOMPANIED BY PHILIP D. MORRISON, IVINS, PHILLIPS & BARKER, WASHINGTON, DC

STATEMENT

Mr. Chairman, my name is Richard Harris. I am manager of Information Management Policy and Productivity at Xerox Corporation based in Rochester, New York. I testify today on behalf of the Rochester Tax Council, an organization representing the major employers in the Rochester, New York area including Bausch and Lomb, Champion, R. T. French, Gannett, Garlock, Gleason Works, Eastman Kodak, Security Bank, Schlegel, Sybron, and my own company, Xerox. I also represent, for purposes of the issue that I would like to discuss today, IBM, Sperry, and Amdahl. I am accompanied by Philip Morrison of Ivins, Phillips & Barker, the Rochester Tax Council's Washington counsel.

I am not a tax lawyer or an economist or a chief executive or a professional Washington lobbyist. I am a computer and data management specialist.

I cannot, therefore, speak about the general benefits of the R&D credit and the need for making it permanent, though each of the companies I represent has found the R&D credit an important incentive and considers prompt action to make it permanent extremely important. Instead, I want to speak briefly about a certain type of research and development conducted by Xerox and others which we think must be eligible for the tax credit if the credit is to serve the goals Congress and the Administration have set out for it.

Last May, before this Subcommittee, Assistant Treasury Secretary Chapoton testified that the goal of the R&D credit was to "encourage industry to undertake the risky research and experimental activities that may lead to productivity-enhancing innovation." We think this statement correctly reflects Congress's intent, as we understand it, in enacting the credit. The reason the government should provide such encouragement, Secretary Chapoton continued, is that the level of R&D motivated solely by the hope of future private profit frequently will be inadequate because businesses may not enjoy the full return to be realized from their innovation. In other words, the total return to society from R&D which leads to productivity-enhancing innovation is often, if not always, higher than the pre-tax economic return to the person conducting the R&D. A tax or other government-supplied incentive is, therefore, appropriate to help the person engaging in the R&D to defray his costs.

The natural focus on technological innovation is also sound; technological innovation does increase productivity. A recent Brookings Institution study shows that greater than 50% of the productivity increases in the United States in recent years has been due to technological innovation.

Justifying the credit, however, is far easier than identifying appropriate creditable activities to assure that the purpose of credit is carried out. Defining or quantifying the terms used to define the goal of the credit is difficult. What is "productivity-enhancing innovation"? How do we define "risky"? How much risk or innovation or improved productivity should we require? How "technological" should innovation be?

In answering these questions two crucial points must be kept in mind. First, productivity-enhancing innovation is not found only on the assembly line. Second, productivity-enhancing innovation is not always incorporated in a product.

Perhaps the greatest potential for substantial productivity gains lies not on the assembly line, but in the office. During the 1970s, for instance, manufacturing productivity increased by 90% while office productivity rose a mere 4%.1/ This indicates that we have barely begun to tap the potential for non-manufacturing productivity gains. This potential is also reflected in the fact that during the 1970's the wholesale price index, reflecting chiefly production costs, rose at a significantly slower rate than the consumer price index, reflecting the cost of non-production internal and external services. The costs of goods and services skyrocketed in the '70's more because of the inefficiencies of delivering those goods and services and not because the production of the goods itself was inefficient.

It is essential, therefore, that any tax provision intended to increase productivity-enhancing innovation not ignore the productivity of the executive, the draftsman, the salesman, the manager, the accountant or the secretary. Indeed, these are the areas where the potential for productivity gains appears to be greatest.

Productivity gains, of course, remain important in the manufacture and sale of products. Products such as computers, copiers, word processors, data communication equipment, and the like are all crucial. A great deal of research and development for improvements to these products is also crucial if American manufacturers are to remain the leading suppliers of the still-growing market for these products.

1/Gilder, Wealth and Poverty (1981) at pp. 209-10.

Productivity-enhancing innovation, however, does not stop with the production and sale of these machines. Rather, it includes the innovative and effective deployment and utilization of these machines in systems -- sometimes industry- or company-specific systems -- so that these machines can become efficient tools to increase the output of those who use them. It is this creative deployment and utilization that makes the "high tech" information management revolution a major force in enhancing productivity.

For automatic data processing equipment, better known as computers, to be deployed and utilized effectively, instructions that tell that equipment what to do and how to do it, known as software, must be carefully developed. Computer software, therefore, can be as important to enhancing the productivity of the machine users as the machines themselves. No one knows better than the proud owner of a sophisticated new personal computer how useless that machine will be without sophisticated software.

For any company with highly specialized data processing needs due to its size, its products, its workforce or other factors, some of its data processing systems will be unique to it. Not only will the particular combination of hardware often be unique, but the software that tells that hardware what to do and how to do it will be unique. For this reason, the software written for these unique systems may not be available for purchase. Companies such as Xerox rarely are able to purchase the innovative software which they require for internal use.

Since such software is not available for purchase it must be developed internally or adapted from software that is for sale. It is the costs of developing the more innovative varieties of this type of software that I hope you will agree should continue to be encouraged by the R&D credit -- the costs of the in-house development of software for internal management, engineering, marketing, distribution and related accounting functions -- the costs of improving the productivity of the executive, the professional and administrative personnel.

The Treasury, in searching for a definition of "research and experimental" for credit purposes, has shown some caution in permitting these sorts of costs to qualify. This caution is based on fears that it may be difficult to properly administer credits where innovation and productivity improvements all take place inside a single organization and do not produce a tangible object susceptible to objective assessment.

Caution may be warranted. For the reasons I outlined before, however, elimination of the credit for such costs due to an over-abundance of caution would be entirely unwarranted.

The costs of innovative, productivity-enhancing internally developed software for internal uses in management and administration are no less worthy of a tax credit than are innovative, productivity-enhancing hardware or other product development costs. Such costs are crucial to the effective use of computers and are incurred in the very area -- the office -- where productivity gains need to be the greatest. Equally important, these costs often involve significant risk and innovation.

The research and experimentation that lie behind the development of much software are often no less innovative than the research and development that go into the machines themselves.

Let me give you an example of an innovative, risky, productivity-enhancing non-product computer software development project of Xerox's that demonstrates why the credit should be available for such costs.

Designing new products efficiently and quickly and getting those new products into production as quickly as possible are crucial to our success in today's highly competitive business machines market. Technology moves so quickly that last year's products are rapidly obsolete. Consequently, Xerox must get its new designs into production very quickly. Xerox has spent considerable time and effort to shorten this process and to make it less costly.

As a step in this process, Xerox has invested heavily in an experimental computer-assisted product design system. Based on Secretary Chapoton's testimony of May 27, 1983 we understand that the software development costs for that computer-assisted design system would be eligible for the R&D credit. Because the computer-assisted design system is not electronically linked to Xerox's bill of material, product cost and parts procurement systems, however, certain engineering and design documentation must still be manually created, retained, and transferred to those who must procure parts for the production of the new product and those who must price that product for sale to customers. This is time-consuming, error-prone and costly.

Xerox, therefore, initiated a project to create a computer link between its computer-assisted product design system and its bill of material, product pricing and part procurement systems. To create that link, Xerox software designers had to convert digital, graphic and textual information to standard codes which could be processed in a data base environment and also had to make adjustments to the normal data flow path within Xerox as well as to the data coding systems used by Xerox personnel.

The scope of this project is very large: by the time it is finished it will require an investment of 100 man-years as well as related new hardware costs of several million dollars, an amount easily in excess of 20% of the annual costs of creating, retaining and transferring the hard-copy engineering documentation. Xerox believes that this substantial commitment of its resources indicates a significant commercial risk.

If successful, the new computer link made possible by the new software should speed up the product-costing and parts-procurement processes for a new product by at least 20%, as well as reducing the cost of those processes by at least 20% and eliminating many errors. In so doing, Xerox will use software in a fashion that is completely new to it and, we think, novel, at least in terms of scale, as compared to others in industry. Obviously, this software is not available for purchase on the open market.

We think there should be no question that a significant portion of the software research and development costs that go into this project should be eligible for the credit. Clearly, "experimentation" is involved and only functional, not stylistic improvement in data creation, retention and transfer are involved. In addition, the data creation, retention and transfer/utilization process will be made significantly speedier and more reliable and significantly less costly. The development of this computer software involves a significant commercial risk to Xerox. Finally, and obviously, this software is not available for purchase and could not be easily adapted from any software that was available for purchase. We think that our new software is clearly "new" enough to qualify the costs of its development as "new or significantly improved" for credit purposes.

I am the first to admit, however, that all computer programming is not a risky or innovative activity. Some computer software development is no more than the simple translation of management tasks from manual-based to computer-based systems.

Some may be the uncomplicated translation of instructions from one computer language to another, though this is not always uncomplicated. Still other software development costs may involve non-innovative preprogramming and implementing aspects of applying innovative software in a non-innovative way such as where the computer instructions are innovative but the tasks performed are not.

The Treasury is concerned that the present definition of research and experimental for the R&D credit may be broad enough to permit a credit for such "mundane" activities. We understand and share that concern.

Partly in response to Senator Danforth's invitation to address these concerns, put forth in the statement introducing S.2165 last November, and partly as a result of an ongoing effort in response to the proposed R&D regulations of last year, the Rochester Tax Council, IBM, Sperry and Amdahl have been working with Treasury and legislative staff to develop standards to distinguish the innovative internal software development costs from the non-innovative. The results of those efforts are attached to this statement.
They include a proposed amendment to S.2165 as introduced and a brief statement intended to be added to the technical explanation that was published in the Congressional Record when S.2165 was introduced.

The standards proposed to be added to the bill to distinguish innovative from non-innovative internal-use software development costs are relatively straightforward. In addition to the two standards presently in the bill -- the requirements of experimentation and functional, rather than stylistic, improvement -- standards which would also apply to internal-use software, we propose three additional standards.

First, the software and the tasks it directs the computer to perform must either be new or show significant improvement in performance, reliability, quality or other functional aspect over existing software and the existing way the tasks are performed. Alternatively, there must be significant costs savings. We believe a 20% increase in speed, the addition of significant novel functions, or the significant reductions of errors and similar functional changes would be the sort of change necessary to qualify under this test. A 20% decrease in the cost of an item as measured against total costs attributable or allocable to such item should suffice as a significant cost saving.

Second, the development or use of the new software must involve commercial or technical risk. The appropriate risks include not only the operational feasibility of the program itself, but the commercial feasibility of the application of the program to its intended use. A substantial commitment of the firm's financial or business resources would indicate commercial risk. Other, more subjective means of assessing risk that Xerox has itself used would be too subjective, we think, to be administerable on a nationwide basis. For your information, however, I have attached to my statement the "Risk Assessment Questionnaire" that Xerox uses in analyzing the risk of new information management projects.

Finally, the software must not be able to be purchased from others and used for its intended purposes without the sort of adaptation which would itself result in the new or significantly improved software.

Because our tests would be applied independently to each significant component of a "business item," that is to both the internal-use software and its utilization, the costs of non-innovative aspects of software development will be disqualified. For instance, if the economic principles or formulas used in an economic analysis are standard or well known, while the programming techniques used to automate that analysis are significant functional improvements over similar programming techniques, the costs of the development of the programming techniques, but not the manual or related costs of employing the economic analysis in the taxpayer's business would qualify. This would eliminate the qualification of non-innovative preprogramming costs and implementation costs when innovative software is used in non-innovative ways. On the other hand, when non-innovative software or programming principles are used as part of the development of a significantly improved business item such as a sales and inventory data communications system, for instance, the costs of writing the software would not qualify, but the costs of the experimentation involved in applying the software would.

It is important to note that we are not advocating the carte blanche application of the R&D credit to all internal-use software development. Based on our preliminary and rough estimate, we believe that only a small percentage of our annual automatic data processing development expenses would qualify under these standards. Xerox Corporation, for instance, spends on internal information management an amount equal to 4-6% of its annual revenues. Of that amount, approximately 25% is spent on developing and maintaining systems each year. We believe only approximately 5% of the total internal information management cost (20% of system development and maintenance costs) would qualify as research and experimentation under our proposed standards. Eastman Kodak has also estimated that the application of these standards would permit only approximately 5% of its total annual automatic data processing budget to qualify for the credit.

While the percentages are small, the dollars to be spent are significant. The availability of the credit for these risky and innovative internal-use software expenditures is crucial for us to continue to be able to make these expenditures. Obviously, in promulgating these proposed standards we recognize that many programming costs are not the risky innovative activity the R&D credit was meant to foster. We are certain the standards we propose will cut back the potential for abuse of the credit while preserving it for these important innovative expenditures.

I appreciate being given the opportunity to testify on an issue that may seem narrow compared to the basic question of making the R&D credit permanent, but which is a question of crucial importance to our effort to make our work force more productive.

STATEMENT OF LARRY R. LANGDON, CORPORATE TAX DIRECTOR AND TAX COUNSEL, HEWLETT-PACKARD CO., PALO ALTO, CA, ON BEHALF OF THE COMPUTER AND BUSINESS EQUIPMENT MANUFACTURERS ASSOCIATION, THE SCIENTIFIC APPARATUS MAKERS ASSOCIATION, AND THE SEMICONDUCTOR INDUSTRY ASSOCIATION, WASHINGTON, DC

Mr. LANGDON. Good morning. My name is Larry Langdon. I am corporate tax director and tax counsel for Hewlett-Packard Co., Palo Alto, CA. I am appearing on behalf of the Computer and Business Equipment Manufacturers Assocation [CBEMA], the Scientific Apparatus Makers Association [SAMA], and the Semiconductor Industry Association [SIA]. CBEMA, SAMA, and SIA strongly support S. 2165.

Making R&D tax credit permanent is the No. 1 tax priority of the associations and their members for this Congress. In enacting the R&D credit, Congress pointed to the fundamental relationship between this country's R&D activities and U.S. economic growth, productivity gains, and competitiveness in world markets, and the consequent need to promote continuous growth in R&D expenditures. With the rising costs of ever more sophisticated high technology projects, and the intensified competition from foreign manufacturers, the need for such an R&D tax incentive is even of greater importance in 1984 and will continue to grow in importance over the decade ahead.

For example, at Hewlett-Packard, more than two-thirds of 1983 orders came from products introduced during the previous 4 years. More than one-half of 1983 orders were for products introduced since enactment of the R&D credit in 1981. A recent survey of SAMA members indicates that companies in the scientific and industrial instruments industry spend an average of 87 percent of after-tax profits on R&D.

It is essential that S. 2165 be enacted early this year to make the R&D credit permanent since many major R&D projects have a cycle of 3 to 5 years or more. For projects taken now in response to the R&D credit, a substantial portion of the R&D costs will be incurred after the current credit is scheduled to lapse, and that is also true if we go with the Treasury 3-year extention.

I would like to focus on the narrow definition of R&D for credit purposes in S. 2165, which we support. In particular, there is a significant narrowing of the definition of R&D that is achieved through the addition of the experimentation requirement. This requirement provides that the development of the product or process must be by means or a process in which alternatives actually are developed and tested and then refined or discarded, thereby excluding a whole range of product development activities in which the specific alternative required to reach the desired objective is readily discernible from the start and readily attainable without the significant risk that is inherently reflected in the process of testing and experimentation. This requirement addresses the general concern expressed that the R&D credit should not be available for routine alterations to existing products or processes or product development activities that involve no significant risks as to the desired objective or for mere reproduction of another's product or process. It is vitally important that the definition avoid the use of vague or potentially overbroad concepts such as routine alterations and substantial risk.

These ambiguous concepts of "routine alterations" and "substantial risk" can be implemented in the real world only by a subjective examination of every case which creates an unworkable situation both for IRS and the taxpayers. We believe that the experimentation requirement can be applied in such a manner to directly address the concern as to activities that are routine, mundane, or lacking in significant risks, while at the same time providing the framework that can be readily applied by both the IRS and the taxpayer on audit. Thank you for the opportunity to make these comments.

Senator CHAFEE. Thank you very much, Mr. Langdon. Now, Mr. Clements.

[The prepared statement follows:]

WRITTEN STATEMENT

OF

LARRY R. LANGDON

CORPORATE TAX DIRECTOR AND TAX COUNSEL

HEWLETT-PACKARD COMPANY

ON BEHALF OF

THE COMPUTER AND BUSINESS EQUIPMENT
MANUFACTURERS ASSOCIATION (CBEMA)

THE SCIENTIFIC APPARATUS MAKERS ASSOCIATION (SAMA)

AND

THE SEMICONDUCTOR INDUSTRY ASSOCIATION (SIA)

My name is Larry R. Langdon and I am Corporate Tax Director and Tax Counsel for Hewlett-Packard Company, located in Palo Alto, California. I am appearing today on behalf of the Computer and Business Equipment Manufacturers Association (CBEMA), the Scientific Apparatus Makers Association (SAMA) and the Semiconductor Industry Association (SIA). CBEMA is an association composed of 40 manufacturers of computer systems, sophisticated business equipment, and other high technology electronics products. SAMA is an association composed of 180 companies, many of small or moderate size, representing the country's manufacturers and distributors of a wide range of scientific, industrial and medical instruments and equipment. SIA is an association representing some 55 companies in the semiconductor industry. I welcome this opportunity to appear before the Subcommittees on behalf of CBEMA, SAMA and SIA and their members and to offer our views on S. 2165.

Research and Development (R&D) is a fundamental tool for attaining the dual goals of preserving U.S. high technology leadership and maintaining U.S. economic well-being. To encourage R&D activities among U.S. companies, CBEMA, SAMA and SIA recommend these actions:

First, we support very strongly making permanent the R&D tax credit. It is a major tool through which the U.S. government can encourage productivity gains and maintain U.S. technological competitiveness.

Second, we support tax incentives that encourage private support of scientific education and university research.

THE COMPELLING NEED IN THE HIGH TECHNOLOGY ELECTRONICS INDUSTRY FOR A PERMANENT R&D TAX CREDIT

The enactment of legislation making the R&D tax credit permanent is the paramount tax legislative priority of CBEMA, SIA and SAMA for this Congress. The R&D tax credit was originally adopted by Congress in 1981 in large part to provide a significant incentive for increases in R&D spending by U.S. companies, thereby increasing the ability of U.S. industry to remain competitive with foreign industry in the development of new products and processes. With the rising costs of ever more sophisticated high technology R&D projects and the intensified competition from foreign manufacturers, the need for such an R&D tax incentive is of even greater importance in 1984 and will continue to grow in importance over the decade ahead.

The fundamental characteristic of U.S. high technology electronics companies, which distinguishes this industry from other U.S. industries, is that in order to survive these companies must continually invest in major research endeavors to develop and apply new technologies and products. Competition in both U.S. and world markets among high technology manufacturers is intense and is focused, to a great degree, between U.S. companies and foreign competitors. In this highly competitive environment, an electronics company which fails to continuously advance technologically will find that its products have been rendered obsolete by foreign competitors. A very significant portion of the sales of many CBEMA, SAMA and SIA members, as well as those of many other companies in the high technology electronics industry, lies in products that were not even in existence just a few years ago. For example, at Hewlett-Packard, more than two-thirds of 1983 orders came from products introduced during the previous four years, and more than one-half of 1983 orders were for products introduced since the enactment of the research and development tax credit in 1981.

A firm's ability to develop and apply new products and technologies is critical to obtaining a competitive advantage. For example, a year's advantage in introducing a new product often can provide the company with as much as a twenty to twenty-five percent cost advantage over competitors. Conversely, a year's lag in introducing a product places a company at a significant disadvantage vis-a-vis its competitors. Accordingly, U.S. high technology companies are locked in a continuous, intensive race with foreign competitors -- most of which are highly subsidized by their governments -- to bring new or improved products and manufacturing processes to the marketplace as soon as possible.

Given this fast pace at which the high technology electronics industry is evolving, each company must devote very substantial efforts to R&D. CBEMA, SIA and SAMA members and other high technology electronics companies, invest on the average as much as fifteen percent of their revenues annually in R&D -- some seven to eight times the percentage invested by U.S. industry in general. For example, Hewlett-Packard in fiscal year 1983 invested almost half a billion dollars in R&D activities on sales totaling 4.7 billion dollars. That is, research and development amounted to over 10.5 percent of annual revenues.

While the R&D tax credit was only fully phased in last year, we believe that the credit thus far has been successful in spurring growth in research and development spending. First, R&D spending remained strong in 1981-83 during the most severe economic recession since World War II. In fact, company-sponsored R&D increased from $30.5 billion in 1980 to $35.4 billion in 1981, with experts estimating an increase in 1982 R&D spending of at least 10 percent over 1981 levels. At my own company, Hewlett-Packard, R&D spending amounted to 10.5% of sales in 1983, as compared to 8.7% in 1980, the year before enactment of the credit.

According to a National Science Foundation (NSF) survey, R&D expenditures in the machinery industry (which includes companies producing office, computing, and accounting machines) was projected to rise more than 8 percent to $6.9 billion in 1983. See National Science Foundation, "Science Resources Studies: Highlights", September 9, 1982, NSF 82-324. NSF estimated that R&D spending in the electrical and communications industry, which increased 12 percent in 1982, would rise at least another 9 percent to $7.7 billion in 1983. Finally, NSF projected that R&D spending in the professional and scientific instruments industry, to which SAMA members belong, which grew by 15 percent in 1982, would continue to grow an estimated 14 percent in 1983 to $3.3 billion.

By contrast, expenditures for non-residential investment increased only slightly between 1981 and 1982, and expenditures for investment in machinery and equipment fell from $216 billion in 1981 to $207 billion in 1982. Thus, according to the NSF survey results, R&D budgets fared well when compared with the budgets of most other corporate departments during the tight financial squeeze brought about by the recent recession. An important reason for the continued strength in R&D spending during this period, according to the NSF survey, is that, despite the high degree of economic uncertainty, lower profit levels, and higher interest rates, corporate R&D personnel were able to persuasively argue with management for protection of R&D activities from internal corporate budget cuts during the economic downturn because of the more favorable tax treatment such projects receive under the credit, as compared with other discretionary company expenditures such as marketing outlays. During the present period of strong economic growth, the R&D credit continues to provide strong leverage to the corporate research department in the corporate budget competition.

For my own company, I can say that the R&D tax credit was of immense value in helping us maintain and increase our research and development investments despite the recent economic downturn in the country and in our bottom line. The result was a better foundation for Hewlett-Packard to emerge from the recession with new products that since have fueled a new round of growth -- and, just as importantly, a new round of job creation. Thus, it seems clear that the R&D credit has had a beneficial effect on R&D spending, thereby vindicating its rationale of encouraging such spending.

Top management at Hewlett-Packard and at every other high technology electronics company now are well aware of the benefits of the R&D credit. The credit has become a significant factor in corporate budgeting decisions and in the crucial decisions as to whether to proceed with R&D projects. Moreover, the benefits of the credit are returned to the R&D function. For example, a recent survey of SAMA members indicates that these companies in the scientific and industrial instruments industry spend an average of approximately 87 percent of after-tax profits on R&D. Indeed, at many high technology electronics companies, including Hewlett-Packard, the increased investment in R&D has greatly exceeded the amount of R&D credit for any particular taxable year.

I predict that if the R&D tax credit is made permanent, strategic planners in corporations, who are required to look well into the future, will continue to take a harder look at more speculative R&D work. The permanence of the tax credit will tip the scales in favor of going ahead, sometimes on very sizable projects, thereby permitting company researchers to seize opportunities that otherwise would be foregone. When a company such as mine is determining where to invest its resources, there always arises the question of balancing the short term and the long term. The short term always seems to have a greater sense of urgency associated with it, and therefore there is a bias towards cutting into long-term programs in favor of the short-term programs. The R&D tax incentive addresses this issue directly. The R&D credit can, and does, encourage investment in the longer-term areas of R&D.

Failure to extend the R&D credit not only will eliminate a valuable incentive for vitally important R&D activities, but also will mean that high technology companies -- which already have among the highest effective tax rates in U.S. industry -- will have suffered, on net, a substantial tax increase as the result of the combined effect of the 1981 (Economic Recovery Tax Act) and the 1982 (Tax Equity and Fiscal Responsibility Tax Act) Acts. One of the primary reasons for enactment of the R&D credit was the congressionally-perceived need to provide at least some tax reduction for high technology companies, thereby overcoming a major deficiency of ACRS, which provided very little tax benefit to such companies as enacted in 1981 and which is detrimental to most such companies as modified in 1982. Allowing the credit to lapse thus would exacerbate the present disparity between high technology companies and capital intensive industries that greatly benefitted from ACRS.

It is essential that S. 2165 be enacted early this year to make the R&D credit permanent. Many major R&D projects have a cycle of five years or more with the greatest dollar amounts of cost coming towards the end of the cycle. Thus, for those R&D projects which would be undertaken now in response to the R&D tax credit, a substantial portion of the R&D costs will be incurred in years after 1985, a point at which the R&D credit currently is scheduled to lapse. Before undertaking a project and at each of the numerous "milestones" in the cycle of a project, a determination will be made whether to undertake or continue the research effort. If the tax incentives embodied in the R&D tax credit disappear, or if their continuation seems problematic, the company's assessment of the financial risk of undertaking or continuing the research project likely will become more adverse and might well lead to termination of the project. Even now the R&D credit is becoming less of a factor in strategic decision making. Conservative management will not rely on an incentive that has less than two years of life. The credit must be made permanent now to sustain its incentive effect.

IMPROVING THE R&D TAX CREDIT

At the same time, the R&D credit can be improved and S. 2165 does exactly that. First, the credit is improved through clarification and narrowing of the definition of qualified research for R&D credit purposes. This change will ensure that the credit fulfills the purposes for which it was enacted. In general, the credit will be restricted to technologically innovative products by focusing on those activities directed toward functional improvements as compared to cosmetic changes. The new definition will require the process of experimentation and testing. This narrowing of the definition provides much needed focus which can be explained to R&D personnel, relied upon by taxpayers, and administered by Treasury.

The revised definition of qualified research in S. 2165 narrows the category of eligible activities for R&D credit purposes in four principal ways. First, the limitation of eligible R&D activities for credit purposes only to those directed toward predominantly functional improvements (such as function, performance, and reliability) eliminates the entire category of style, cosmetic, taste, and seasonal design improvements often undertaken purely for marketing purposes and eliminates all improvements in which cosmetic changes dominate functional changes. Second, by requiring that the product or process be developed by the process of experimentation, including the development, testing, elimination, and refinement of alternatives, the revised definition of R&D for credit purposes excludes a whole range of product development activities in which the specific alternative required to reach the desired objective is readily discernible from the start and readily attainable without the significant risk that is necessarily reflected in the process of testing and experimentation. Third, the exclusions with respect to post-production activities generally, planning for commercial production, and adaptation of an existing product to specific customer needs will provide a clearer and more enforceable line that will foreclose a taxpayer from claiming the credit with respect to activities which no longer constitute product development but instead are part of the initial stages of commercial production. Finally, S. 2165 seeks to ensure that software developed by the taxpayer for its internal use (other than in R&D, a plant process, or a computer service) will qualify for the credit only where such internal software is truly innovative. Software developed for use in R&D qualifies for the credit at least as direct support of qualified research, and the credit eligibility of software developed for use as a separate product or combined hardware-software product, for use in a computer service, or for use in a plant process will be determined under the R&D credit rules applicable to products and plant processes generally.

In particular, I would like to focus upon the significant narrowing of the definition of R&D for credit purposes that is achieved through addition of the experimentation requirement. This requirement provides that the development of the business item must be by means of a process in which alternatives actually are developed and tested and then refined or discarded. This requirement addresses the general concern expressed that the R&D credit should not be available for "routine" alterations to existing products or processes, for product development activities that involve no significant risk as to attainment of the desired objective, and for the mere replication of another's product or process. It is vitally important that these issues be addressed in a way that avoids the use of vague or potentially overbroad concepts such as "routine alterations" and "substantial risk". Such ambiguous concepts can be implemented in the real world only by a subjective examination of every case, creating an unworkable situation for both the Internal Revenue Service and taxpayers.

The concept of experimentation provides an administrable framework for separating out truly "routine" or "mundane" activities from those activities involving a significant risk that specific alternatives will not give rise to a usable result. If a taxpayer can show (through working papers setting forth the history of the project) that alternatives were in fact developed and tested, and that some were discarded and others refined and adopted, the experimentation requirement will have been met. In such situations the very fact that experimentation was undertaken means that the activities were not "mundane" or "routine" and involved some risk that specific alternatives would not give rise to a usable and desirable result.

If, on the other hand, the alternative required to reach the desired objective is readily discernible and readily applicable from the beginning, so that true testing need not be undertaken to develop or evaluate alternatives, the product or process would not be new or significantly improved and would fail to qualify for the credit. Excluded under this provision, for example, would be the activity of developing a product or process where the substantial portion of the costs incurred relate to duplication of another company's product or process from specifications, blueprints, or plans that are publicly available or are obtained by license or similar arrangement. By contrast, a product or process would qualify as new or significantly improved for credit purposes where, in order to create the item, the taxpayer initially examines a competitor's product or process and then must formulate a substantially new design through a process of experimentation that requires the testing of alternatives and reformulation based upon the knowledge gained from such tests.

In short, we believe that the experimentation requirement can be applied in such a manner as to directly address the concern as to activities that are "routine", "mundane", or lacking in significant risk, while at the same time providing a framework that can readily be applied with certainty by both the Revenue Service and the taxpayer.

In addition, S. 2165 makes eligible for the R&D credit depreciation of research equipment. This change merely assures that all direct costs of R&D qualify for the credit and provides a more balanced incentive.

S. 2165 also extends the R&D credit to new companies, without extending it to tax shelters. In this way, the credit would be made available to start-up corporations, as well as to an existing corporation participating in a new research endeavor seeking to expand and diversify beyond its existing trade or business. This change will correct a serious problem with the current credit which has excluded some highly innovative companies and ventures.

PROMOTION OF UNIVERSITY BASIC RESEARCH AND SCIENTIFIC EDUCATION

I also want to stress the importance of the educational aspects of S. 2165. By encouraging private industry support for scientific education and university research, the Act addresses the need to improve our nation's technical education base and the need to encourage greater basic research.

At the university level, education in mathematics, engineering, and the physical, biological and computer sciences has suffered from a chronic shortage of faculty and a severe lack of up-to-date scientific equipment upon which to learn and perform research. For example, there now exist approximately 2,000 vacancies in university engineering faculties, and similar shortages exist in mathematics and other scientific disciplines. Universities face great difficulty in stretching tight budgets to compete with private firms for graduate-level engineers. Merely to replace outdated scientific equipment, universities would have to invest hundreds of millions of dollars. The result of these deficiencies has been a severe shortage of trained mathematicians, scientists, and engineers. S. 2165 offers constructive proposals for using the tax system to encourage corporations to take a leading role in combating these problems.

The high technology electronics industry recently has experienced tremendous and rapid growth in product innovation -- growth which approaches the limits of existing scientific knowledge. To permit future growth in this high technology, corresponding advances must be made in the foundations of knowledge in the field of mathematics, engineering and physical science which underlie such technology. Accordingly, SAMA, SIA and CBEMA welcome the efforts in this bill to encourage spending by private firms for basic research projects conducted by universities.

By providing a revised flat-rate credit for a corporation's funding of basic university research that exceeds a specified minimum level of funding, the U.S. can regain its lead in this important sector of R&D. Basic research cannot usually be undertaken by private industry, and the nation's universities have been the fountainhead of this essential research. A large incentive should be provided to private industry to contribute to this undertaking.

Similarly, the provisions regarding enhanced deductions for corporate donations of scientific equipment to post-secondary schools should be continued and expanded. The 1981 legislation in this area has had a dramatic impact on Hewlett-Packard philanthropic activity. Early on, top management made the decision that every dollar of the tax benefit arising from the enhanced deduction would be added to the equipment donations budget. Hence, we have seen a dramatic increase in the level of university equipment donations. In fiscal year 1980, the year prior to enactment of the enhanced deduction, our budget for equipment donations was $3.7 million. Our fiscal year 1984 budget is in excess of $40.0 million, a 1000 percent increase.

This trend must be continued and expanded. The Act will do this by means of the following:

- eligible uses of the property are expanded to include direct scientific education as well as research and research training.
- donations of computer software are made eligible for the deduction.
- donations of state-of-the-art equipment used in a trade or business are made eligible for the deduction.

-- donations of standard maintenance and repair services are made eligible for the deduction.

Each of these improvements not only provides a greater incentive to private industry but also makes the donation more valuable to the university in terms of flexibility of use and ease of support.

I appreciate the opportunity to voice here today the strong support of SAMA, SIA and CBEMA for S. 2165 which would improve and make permanent the R&D tax credit and provide important tax incentives for corporate support of university science education and basic research. Your support for this vitally important measure will help strengthen U.S. high technology in the decades to come. Thank you.

STATEMENT OF NICHOLAS CLEMENTS, VICE PRESIDENT, BLYTH EASTMAN PAINE WEBBER, NEW YORK, NY

Mr. CLEMENTS. My name is Nicholas Clements. I am a vice president with Blyth Eastman Paine Webber, Inc., which is the investment banking subsidiary of the Paine Webber Group. Paine Webber is a nationwide brokerage company with over a million active retail accounts. We certainly support the position that the R&D tax credit be made permanent.

My testimony is focused on the impact of the credit on research and development limited partnerships. Approximately $450 million was raised by U.S. companies through the R&D partnership vehicle in 1983. We expect that U.S. industry will obtain approximately $500 million through this vehicle in 1984 and, if the tax law is clarified in this area, substantially more than this could be obtained in future years.

R&D partnerships allow corporations to transfer to individual investors the risk and financial burden of R&D associated with specific technologies. In return for accepting this risk, investors share in the profits generated by the technology that they have funded. We believe strongly that this financing vehicle has not been focused on by Congress and should be recognized as an integral component of the national R&D effort. A huge reservoir of individual investor funds available in the United States has the potential to be a major contributor in the national effort to increase innovation and productivity through increased R&D expenditures. These R&D partnerships compete for the attention of investors with real estate, equipment leasing and other tax shelter investments. In this competition for investor dollars, R&D partnerships start at a disadvantage in that they are not tax shelters as such because only about 90 percent of the investment is deductible, compared with the 200-400 percent deductibility of true tax shelters.

In order for us to successfully sell to investors and to attract funds away from these investment alternatives, projected R&D partnership investor returns must be competitive. Tax benefits are integral to the economics of these returns. The R&D credit is one such tax benefit that could help make these R&D partnerships more competitive. The R&D credit is generally not available to investors in or to companies which sponsor those R&D financing partnerships. The R&D credit is simply lost to both parties.

If the company funded the R&D internally, the credit would, however, be allowed. It seems irreconcilable with the national interest objective of the R&D tax credit to discriminate in this way against the private individual who is willing to invest in R&D. Section 104 of S. 2165 allows the R&D credit to flow through for the benefit of corporations which enter into R&D joint venture partnerships. We feel that this section should be expanded to allow the R&D credit to flow through not only to corporations which are partners, but also to individual investors.

We believe that this can be done without net reduction in tax revenues because (1) we would be diverting investment away from other tax shelter investments into the R&D area, and (2) the credit could only be used by an individual against income generated by the partnership, and could not shelter income from other sources.

Senator CHAFEE. I must say that is an area that I hadn't thought much about, nor do I know too much about.

[The prepared statement of Nicholas Clements follows:]

TESTIMONY BEFORE SENATE FINANCE COMMITTEE ON S. 2165—FEBRUARY 24, 1984

Mr. Chairman, members of the committee, my name is Nicholas Clements. I am a Vice President with Blyth Eastman Paine Webber Incorporated which is the investment banking subsidiary of Paine Webber Inc. Paine Webber is a full-service brokerage company with over 4,000 brokers nationwide servicing more than 1,000,000 active retail accounts.

My testimony today is limited to Title I of S. 2165, concerning the R&D tax credit, and its impact on Research and Development Limited Partnerships.

The Paine Webber group has been among the pioneers in financing private sector research and development through privately-placed R&D Limited Partnerships. Approximately $250 million was raised by U.S. companies through the R&D Partnership vehicle in 1983; approximately $120 million of this by Paine Webber. We expect that U.S. industry will obtain approximately $500 million through R&D partnerships in 1984. If the tax law is clarified in this area, we believe that substantially more than this could be obtained in future years.

R&D Partnerships allow companies to transfer to individual investors the risk and financial burden of research and development associated with specific technology projects. In return for accepting this finanical burden and risk, investors share in the profits generated by the technology that they funded. Although the tax law is still somewhat unsettled in this area, we obtain opinions from counsel that investors are able to deduct most of their investment as it is made and, thereafter, receive long term capital gain treatment for amounts returned to them if the tehnology is successful.

We believe strongly that this financing vehcile should be recognized as an integral component of the national R&D effort. The huge reservoir of individual investor funds available in the United States has the potential to be a major contributor in the national effort to increase innovation and productivity through increased R&D expenditures.

R&D Partnerships compete for the attention of investors with real estate, equipment leasing and other tax shelter investments which are of dubious benefit to the national interest. In this competition for investor dollars R&D Partnerships start at a disadvantage in that they are not "tax shelters" as such because only about 90%

of the investment is deductible, compared with the 200 to 400% deductibility of true (and sometimes abusive) tax shelters. In order to be successfully sold to investors and to attract funds away from these investment alternatives, projected R&D Partnership investor returns must be competitive. Tax benefits are integral to the economics of investor returns. The R&D tax credit, which is the subject addressed by Title I of S. 2165, is one such tax benefit which could help in making R&D Partnerships more competitive.

The tax credit for R&D expenditures is available to most corporations which undertake R&D. It is, however, generally not available to investors in, or to companies which sponsor, R&D Partnerships. For technical reasons associated with the fact that title to the sponsoring company's technology is transferred to the Partnership, the R&D credit is simply lost to both parties. As a result, if outside funds are used for the R&D effort the R&D credit is lost to all parties, whereas if the company funded internally the credit would be allowed. It seems irreconcilable with the "national interest" objective of the R&D tax credit to discriminate in this way against the private individual who is willing to invest in research and development.

Proposed Section 104 of S. 2165 allows the R&D credit to flow through for the benefit of corporations which enter into R&D joint venture partnerships. We propose that this section be expanded to allow the R&D credit to flow through not only to corporate partners in an R&D joint venture partnership but also to individual R&D limited partners in a financing R&D partnership. We have prepared and would be happy to make available specific language in this regard.

We believe that this proposed amendment would have little negative effect on tax revenue because:

(1) Allowing the credit to R&D Partnership Investors would cause investment funds to be diverted away from other tax shelter investment areas, thus causing no net reduction in government revenue, and

(2) The credit could only be used by an individual member of a partnership against income arising from that partnership (that is, arising from the technology funded) and could not "shelter" income the individual might have from other sources.

In summary, we believe that the proposed amendment would eliminate an unintended discrimination against private investors, would channel funds away from undesirable tax shelter investment vehicles towards the national R&D effort (with attendant benefits in the areas of national productivity and innovation), all without adverse impact on net tax revenues. This is just one proposal among a series that we are making in an effort to promote changes in the legislative and regulatory environment surrounding R&D Partnerships. We strongly believe that R&D Partnerships should be encouraged as part of the coordinated effort to increase U.S. research and development expenditures.

Thank you for your time and attention.

STATEMENT OF L. THOMAS BRYAN, JR., CHAIRMAN, COMMITTEE ON CAPITAL AVAILABILITY FOR RESEARCH AND DEVELOPMENT, NEW ENGLAND COUNCIL, INC., WASHINGTON, DC

Mr. Bryan. Thank you, Senator Chafee and Senator Danforth, for allowing the New England Council to be here today. We very much appreciate the opportunity to speak on behalf of S. 2165, which the New England Council has made its primary legislative priority for 1984. The Council is made up of 1,200 businesses and higher educational institutions in all six States in New England, only a minority of which are high tech companies. We strongly support S. 2165 primarily because the high tech industry in New England has played a direct, major role in improving New England's economy and, most importantly, the benefits of the innovations from the high tech industry are now flowing down to our basic manufacturing and service industries in New England.

High tech is clearly New England's highest manufacturing employer—roughly 30 percent of all our employment in manufacturing. It is our largest exporter—69 to 70 percent of our exports. It is our largest capital investor—roughly 51 percent again this year will be made by the high tech industries. So, by every count, it is really our most important industry, and what is happening in New England, we see is happening in the other major and growing high tech centers around the country.

What do we need to do to keep high tech growing? The list is very short and very simple. High tech needs to have encouragement for increased research and development, and high tech needs increases in the supply of engineering and scientific challenges. Therefore, working with the university sector is a major, important element in high tech's future. We think that S. 2165 satisfies most of the industry's needs. It makes the R&D tax credit permanent. It treats software and hardware on a parity. It extends the credit to startups and new businesses. It encourages R&D expenditures for industries and universities and encourages donations of much needed equipment to universities.

We feel that the most important beneficiaries of S. 2165, however, will not be high tech. It is going to be the basic service and the manufacturing industries in New England and throughout the country. These are the users of the innovations that high tech is producing, and these are also the most significant employers. As Peter Drucker pointed out in an interesting article last January in the Wall Street Journal, that while our adult population has grown about 38 percent in the last 20 years, the number of jobs has grown over 45 percent in the last 20 years. And it has not been Government and large business that have provided this employment. It has been primarily medium-sized businesses. We feel that innovations are being provided by high tech that are most important for that sector, and they are the largest employers. Thank you.

Senator **Chafee**. Thank you, gentlemen.

[The prepared statement follows:]

STATEMENT OF L. THOMAS BRYAN, JR., CHAIRMAN, COMMITTEE ON CAPITAL AVAILABILITY FOR RESEARCH AND DEVELOPMENT, NEW ENGLAND COUNCIL, INC.

1. The New England Council, made up of 1200 businesses and educational institutions in New England, only a minority of which are high technology companies, strongly supports passages of S.2165, the High Technology Research and Scientific Education Act of 1983.

The New England Council, founded in 1925, has made passage of S.2165 its most important legislative priority for 1984. Only a minority of the New England Council's membership are participants in the high technology industries. Most of our 1200 members are engaged in basic manufacturing, energy, transportation, and a wide range of service industries. It is because high technology is so important to the future development of increased productivity in these industries, as well as making a direct contribution to the continued strength and growth of New England's economy, that the New England Council so strongly urges Congressional passage of S.2165 in 1984. We also urge its passage because we believe S.2165 will play a major role in the future growth and development of basic manufacturing and service industries as well as the high technology industries in other parts of our nation. We believe the negative impact on Federal deficits will be insignificant in comparison to the future benefit to the national economy.

2. The high technology industries have played a critical role in New England's recent economic development.

(a) High technology is the largest manufacturing employer in New England, having grown from 301,000 jobs in 1975 to 425,000 in 1981, an increase of 40% in six years. This has contributed substantially to a reversal of New England's traditional economic position.

Before 1978, New England's unemployment rate was 1-2% higher than the nation's, but since 1978 it has been 1-2% lower than the nation's. Employment in some of New England's traditional industries, such as textiles, leather and shoe manufacture has declined, and has been replaced in large part by increased employment in the high technology industries. (See Chart 1) Relative to the nation, employment in the high technology industries has increased, while employment in most other sectors of manufacturing has declined. (See Chart 2).

(b) High technology is New England's largest source of exports, having provided 69% of New England's exports in 1980. Because high tech companies typically export 30-40% of sales to Europe, Canada and the Far East, we would expect high technology to continue to be our principal exporter in the future.

(c) High technology is New England's largest capital investor. In 1983, for the first time, high technology provided 51% of New England's capital spending. Bank of Boston's New England Capital Spending Survey projects a similar performance for 1984. The computer industry alone is expected to spend $1.1 billion of the projected $5.7 billion in 1984 capital spending in New England. From another perspective, 12%, or over $200 million, of the $1.8 billion of nationwide venture capital investment in 1982 occurred in Massachusetts and an estimated $300 million in all of New England. (43%, or $775 million, went to California)

3. What's good for New England is good for the ten other high technology centers in the nation. New England is only the second largest high technology center in the U.S. The largest is California--both in Silicon Valley and in Southern California. There are eight other important regional centers where high tech is either of significant importance or is growing rapidly:

1. The Mid Atlantic Region--
   New York, New Jersey, Pennsylvania, and the Washington DC area.
2. The Southeast Region--
   Florida, Georgia, North Carolina, and Alabama
3. Texas
4. Colorado
5. Washington
6. Oregon
7. Minnesota
8. Arizona

High Technology is clearly a national economic phenomenon. What has happened in New England and California will happen in each of these regional centers and in other regional centers as they emerge in the future.

4. How Do We Keep High Technology Growing?--Support Research and Development and Education.

Unlike many of our nation's troubled basic industries, which are seeking a broad array of government assistance, ranging from Federal loan banks, to import barriers to tax subsidies, the needs of the high technology industries are modest and essentially twofold:

(a) Encourage Research and Development. Most high technology companies spend 7% to 20% of sales on R & D. This constitutes their largest capital expense, usually several times their annual expenditure on plant and equipment. By comparison, the annual depreciation expense in the capital intensive industries like steel or aluminum is only 1.6% to 3.6% of sales.

(b) Increase the Supply of Superior Engineering and Scientific Talent. The real assets of a high technology company do not appear on its balance sheet. They are its technology and its management, the two most critical assets for innovation and growth. This means that the future development of our high technology is directly linked to a continuing flow of superior engineering and scientific talent--the minds that will conceive and develop the innovations of the future. Our universities are the producers of these minds. For this reason, the high technology industries have greatly accelerated their support of, and work with, universities during the past several years. A broad range of innovative programs ranging from joint venture R and D contracts, to equipment donations and scholarship funds have been actively supported by the industry. Congress recognized this trend in the tax legislation of 1981 by providing new incentives in the form of the R & D tax credit and increased deductions for equipment donations, thus encouraging further support of our nation's critically valuable scientific education establishment by industry.

5. S.2165 Meets High Technology's Needs. S.2165 meets most of the above needs.

(a) S.2165 makes the R & D tax credit permanent. Congress has provided permanent tax incentives to incent industry, including the capital intensive industries, to invest in new plant and equipment through accelerated depreciation rules and investment tax credits. These do not apply to R and D expenses, however. To encourage increased capital spending on R and D by the high technology industries, Congress introduced the R and D tax credit in 1981. We believe that it has had a very positive effect in accelerating the pace of R and D expenditure, which increased nationally by 16% in 1981, 8.4% in 1982, and an estimated 8.2% in 1983. By comparison, during the recession years of 1981, 1982 an 1983, capital spending on plant and equipment increased only 8.7% and decreased 1.2% and 1.3% respectively. Its expiration in 1985 means that these incentives to incremental R&D investment will disappear. By making the R&D tax credit permanent, through S.2165, Congress will put this credit on a parity with the investment tax credit, which will enable high technology management to incorporate it as a permanent capital cost reduction in its long term R&D planning. This is important because R and D is not a single year expenditure - it takes many years to complete most R and D projects. Passage of S.2165 will mean that R and D investment should continue to increase at rates in excess of both capital spending and inflation - a critical need if our economy is to retain its worldwide technological competitive edge.

(b) S.2165 treats software R and D on a parity with hardware R and D. This clarifies the existing law, which the Internal Revenue Service in its proposed regulations of 1983 construed to impose more restrictive tests for software R and D than for hardware R and D to qualify for the credit. Software R and D must be treated on a parity with hardware R and D. Nearly 60% of the cost and 27% of the sale value of a computer system today is attributable to software. Most computer manufacturers devote about one third of their R and D expenditures to software development. A substantial portion of the capital investment of a new computer company - somewhere between 25 and 50% - must be devoted to software development. The software business is a major business expected to grow from $8 billion in 1983 to $30 billion in 1988 or from 27% of the value of 1983 computer hardware to 50% of its value in 1988. Software is, and will continue to be, a major part of New England's high technology industry, which has created such well known software programs as Visicalc and Lotus 1-2-3.

(c) S.2165 extends the credit to start ups and new businesses. Under existing law the taxpayer must be "carrying on" a business to qualify for the R and D credit. This excludes both start up companies and new businesses of existing companies. Start ups have been the backbone of the development of the high technology industry in New England and in most other high technology centers. DEC, Data General, Prime and Wang, were all start up companies fifteen to twenty years ago. Today they account for nearly $8 billion in sales. The R and D credit can play a very significant role in reducing this cost of capital for a startup thereby providing additional incentives for enterpreneurs and investors to invest in new high technology enterprises. In 1972 Wang was a $36 million, slow growth producer of calculators, when it introduced its first word processor. Today it is a $1.8 billion leader in word processing and office automation employing over 18,000 worldwide. Existing law would not allow the credit for the similar development of a new product where it constitutes a whole new business for an enterprise. S.2165 corrects both of these defects.

(d) S.2165 encourages increased R and D expenditures by industry through universities, particularly for basic research. Congress should aggressively encourage industry to do more research through university because we get double value for each dollar so spent: the R and D and increased cash flow through the university sector to strengthen the scientific and engineering teaching infrastructure. Research dollars, be they government or private, fund a substantial portion of the costs of the post graduate, doctoral and professorial staff that teach the courses and run the labs which are so essential to future development of the superior engineering and scientific talent required by the high technology industry.

(e) S.2165 encourages donations of much needed equipment to universities. Congress took positive action to encourage the much needed re-equipping of America's university laboratories in

1981 by expanding the scope of the deduction allowable for equipment donations. S.2165 carries this two critical steps further. It allows the deduction for equipment donated to be used in scientific education, as well as research. It also allows the deduction to apply to software and maintenance contracts. This means industry will be incented to make donations of teaching as well as research equipment. S.2165 will also solve a critical problem for many of the donee universities which cannot afford to purchase the software needed for this equipment or to pay for maintenance, as both of these supplementary but essential elements to an instrumentation or computer system will now qualify as deductible donations.

6. The most important beneficiary of S.2165, however, will not be the high technology industry - it will be America's basic manufacturing and service industries. The principal objective of all high technology companies is to provide end users of their products with increased productivity. Any high technology company that does not accomplish this will fail very quickly. High technology is of value, therefore, only to the degree to which it enhances productivity in other sectors of our economy, such as:

- making manufacturing processes more efficient, of higher quality and more human, such as robotic welding machines for the auto industry;

- enabling materials producers to reduce energy costs and improve production quality through process controls, as in the steel and aluminum industries;

- enabling utilities to cut costs by improved monitoring and control of energy utilization throughout their systems;

- enabling service industries to have cheaper and improved telephone and data communications to cut their selling and service costs;

- enabling small business to have inexpensive, easy to run data processing systems to help them control and reduce costs of production or service;

- enabling Federal, state and local governments to control and reduce the cost of delivering services;

- even enabling members of Congress to analyze information, communicate issues and inform their constituancees better, faster, cheaper.

The products and services of high technology contribute to all of these, and in so doing will contribue substantially to that part of our economy which has generated the most new jobs in the past 20 years - the "low-tech" or "no-tech" mid-sized manufacturers ($25 million to $1 billion in sales) which grew four times as fast as the top Fortune 250 from 1975-1980. While America's adult population grew 38% from 129 million to 178 million between 1965 and 1984, the number of jobs grew by 45% to 103 million from 71 million. As Peter Drucker points out in his article in The Wall Street Journal (1/24/84) "Why America's Got So Many Jobs", these new jobs didn't come from government or big business:

> "Government stopped expanding employment in the early 1970s. Big business has been losing jobs since the early '70's. In the past five years alone the Fortune 500...have permanently lost around three million jobs. Nearly all job creation has been in small and medium-sized businesses, and practically all of it in entrepreneurial and innovative business... Even during the worst of the recent recession, when the Fortune 250 cut employment nearly 2% in one year, the midsized growth companies added one million jobs - or 1% of the country's employed labor force. And all that these companies have in common is that they are organized for systematic entrepreneurship and purposeful innovation."

While high tech has clearly contributed directly to New England's low unemployment rate, its greatest contribution has been indirect - to the small and medium sized businesses that are the backbone of New England's economy which have been the beneficial users of high tech's innovations in their businesses. What has happened in New England has happened elsewhere in the nation. By passing S.2165 Congress will assure that high technology's innovations, which are the basis for the most pervasive growth in our economy in the medium sized manufacturing and service businesses, will continue.

- IN 1972, 20% MORE OF NEW ENGLAND'S LABOR FORCE WAS IN MANUFACTURING RELATIVE TO THE U.S.
- BY 1980, NEW ENGLAND'S HIGH TECH SECTORS WERE CLAIMING INCREASING SHARES OF THE LABOR FORCE:

  —NONELECTRICAL MACHINERY

  50% GREATER LABOR FORCE SHARE THAN U.S. NORM

  —PRECISION INSTRUMENTS

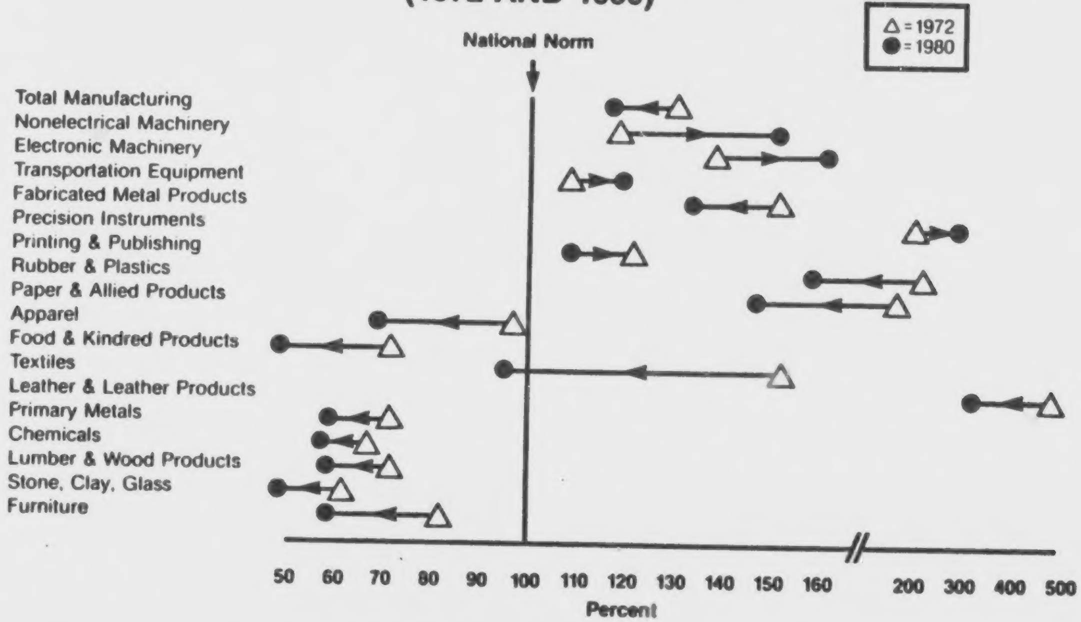
  150% GREATER LABOR FORCE SHARE THAN U.S. NORM

- TRADITIONAL INDUSTRIES ARE EXPERIENCING RAPID DECLINE. MANY ALREADY HAVE SIGNIFICANTLY LOWER THAN AVERAGE SHARES OF THE LABOR FORCE.

The New England Council, Inc.

CHART 2

PROPORTION OF NEW ENGLAND'S LABOR FORCE IN MANUFACTURING RELATIVE TO THE NATIONAL NORM (1972 AND 1980)



SOURCE: Data Resources, Inc.

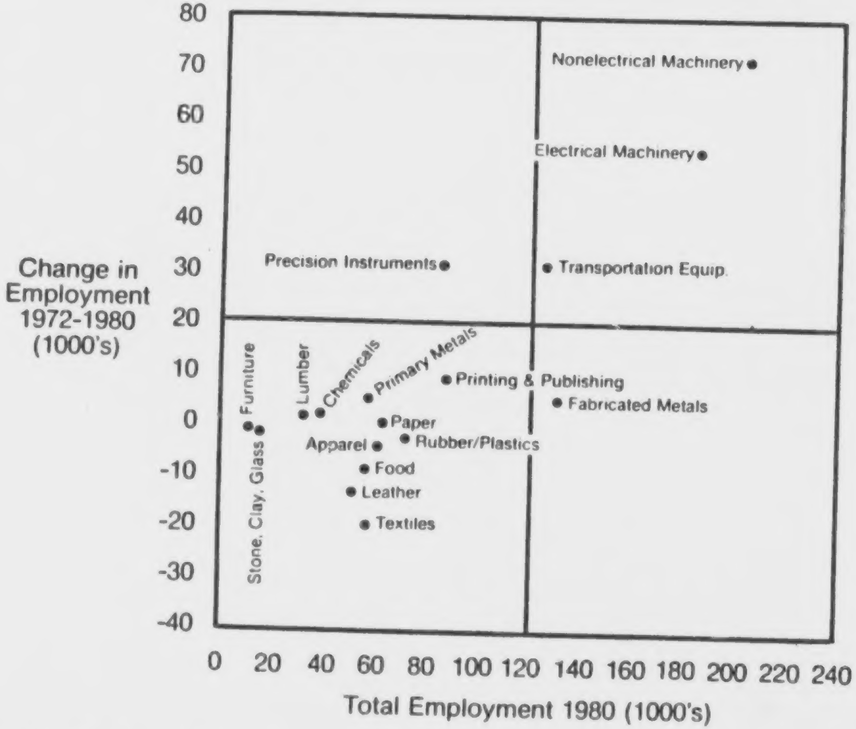
The New England Council, Inc.

- FOUR MANUFACTURERS STAND OUT AS LARGE AND FAST GROWING:
  - —NON ELECTRICAL MACHINERY
    - COMPUTERS, OFFICE MACHINES
  - —ELECTRICAL MACHINERY
    - SEMICONDUCTORS, COMMUNICATION EQUIPMENT
  - —TRANSPORTATION EQUIPMENT
    - SHIPS, AIRCRAFT ENGINES
  - —PRECISION INSTRUMENTS
    - OPTICS, HEART MONITORS
- NONELECTRIC MACHINERY:
  - —EMPLOYED OVER 220,000 IN 1980
  - —HAD THE GREATEST INCREASE IN WORKERS, 70,000
- TRADITIONAL INDUSTRIES ARE STATIC OR LOSING JOBS:
  - —TEXTILES 20,000
  - —LEATHER 15,000

The New England Council, Inc.

CHART 1

NEW ENGLAND MANUFACTURING EMPLOYMENT IN 1980 VS CHANGE IN EMPLOYMENT 1972-1980



The New England Council, Inc.

SOURCE: Department of Labor,
Bureau of Labor Statistics,
New England Regional Office

Senator CHAFEE. Senator Danforth.

Senator DANFORTH. I very much appreciate your testimony and I would simply reinterate the questions that Senator Chafee put earlier. That is, I don't know if you were here to hear Secretary Chapoton testify, but essentially he makes two points. One is that this should not be a permanent extension, but a 3-year extension. Second, that the definition should be tightened and more focused than it is now.

Mr. WELLINGTON. I would be happy to comment on that.

Senator CHAFEE. Mr. Wellington.

Mr. WELLINGTON. I think there is an overemphasis being placed on the inability to review the legislation if it were made permanent. No legislation—as you know much better than I—is permanent, and if there is demonstrable abuse or the need for corrective action, it can be taken without putting a 3-year sunset or any sunset on the bill. But from the standpoint of the companies, their investment decisions—those basic R&D endeavors which require extensive studies—take on the average 6 years after initiation before turning profitable. In my own case, I cited that ceramics case, which is just a typical one, that was started in 1978. It has been accelerating. We hope in 1984 that it will become profitable. Had that been a 3-year type of a thing, or if it had been expiring in 1983 or 1984 instead of starting, we would have had serious reservations about continuing that commitment.

The second thing—on the definition—I think there is a need, as we have addressed in S. 2165—for a tighter definition. However, I don't think it should be subjected to retrospective's review which leaves one in a position where the R&D head may come in and say after 5 years we see light at the end of the tunnel. And then you find out that the light at the end of the tunnel is the headlight of a locomotive from the IRS about to disallow what you have invested under good faith that it was an R&D effort. The Treasury's proposed is too subject to retroactive second-guessing, mostly by people who would not have the expertise to make that judgment. So, we should get a definition as it is proposed and then stick with it.

Senator DANFORTH. Anyone else?

Mr. LANGDON. As the only tax guy on this panel, I guess I could also comment with regard to the IRS audit issue. I think what we should end up with is a definition that avoid blurry lines or retroactive disallowance of the credit, and that is frankly what I am afraid of with regard to the proposed Treasury definition. We think that we have got a fairly ascertainable standard in the bill with regard to the concept of experimentation and the idea that the alternatives actually have to be developed and tested and then refined or discarded. Admittedly, it is not as narrow as the Treasury test, but by the same token it is certainly a lot narrower than the existing law. As indicated in our written testimony, under S. 2165 if the taxpayer can show the working papers setting forth the history of project that experimentation occurred, this should be sufficient to the IRS. We should use objective criteria rather than the concept of risk which tends to look inside the engineer's heads as to what went on during the process, and that is always difficult to do after the fact.

Mr. BRYAN. One comment I might add. I am chairman of the Committee on Capital Availability for Research and Development of the New England Council, the committee consists of 30 members, some of whom are high tech and some of whom are universities as well as professional people. I am the head of the high technology lending group at the Bank of Boston, so I spend my life financing high tech companies.

One thing seems very clear to me from both my committee and professional experience, and that is that research and development is not a one-time expense. It is a commitment to a 3 to 5 to 8 year and sometimes 10 year development program. And this is as true with the companies as it is with the universities. So, if the purpose of this legislation is to not only stimulate R&D at the company level but also at the university level—and universities are very concerned, equally concerned that this thing may expire in May 1985 or maybe be renewed for another 3 years. So, I have found in working with both sectors that each are equally concerned that expiration doesn't really give you the incentive if you can't plan a long-term R&D project. And that is critical for the business sector because this tax incentive is going to be really effective when it gets into planning processes of the company. If it is going to be around for only a couple of years, no one is going to bother with it. So, I really feel that that issue is very critical to this tax credit. On the definition issue, in reading over Mr. Chapoton's testimony this morning, this really bothers me because it seems to be a lot of what is going on in the computer industry. And that is the example where the company tried to develop a personal computer using existing technology. To a large degree, much of our innovation is going to come now through manipulations of this technology. We have gone through a period when the major impact in the computer industry has come through the development of microprocesses. And now, we are applying those microprocesses to different uses, and to have Internal Revenue subsequently come in and say that doesn't look very original, then I would say, in effect, the Apple computer might not qualify. Look at the impact that computer had. I suppose if you could go back, you could argue that all they did was use existing technology. Much of New England's minicomputer businesses in our area are now engaged entirely in this process of using, in different ways, existing technology—for what function except to improve the computer. Now, that is why the functionality test is really the most relevant test that we could use. And I think we saw quite a tear through this during the discussions on the R&D Tax Code regulations last winter, in which the New England Council also participated in the testimony, quite a tear around the whole problem—is this innovation or isn't this innovation? And it seems to me that what one must focus on is whether or not it improves the function of the device. That is what the purpose of innovation is. And so, we feel that the definitions that are in S. 2165 are right on, and we should keep them. I am a little disturbed at the way in which Treasury is arguing because we think that they may be missing some of the point.

Mr. MORRISON. Could I make two brief points about the Treasury's position regarding the definition of R&D, Senators. The first point is that while the factors that the Treasury proposes for identifying innovation and productivity-environment may be appropriate factors, indeed, they are very similar to those advocated by the Rochester Tax Council for internal-use software, unless those factors are translated into objective and quantifiable legislative or regulatory standards, as we suggest in our written submission we feel that both the IRS and the taxpayers will have a hell of a time determining what is qualified R&D and what is not. The second brief point is that Treasury, in insisting upon a very narrow definition of qualified research, seems to forget that the credit is incremental, that is, that we are only dealing with increases in R&D over base period expenditures. I think if we permit the Treasury to succeed in promulgating a very narrow definition, combined with the incremental aspect they may well define the R&D credit out of existence.

Senator DANFORTH. Thank you very much.

Senator CHAFEE. Gentlemen, thank you very much. Mr. Langdon, I wonder if you could come up for 1 minute? I wanted to ask you a question.

The next panel—we are skipping a panel—and we will go to the last panel. Mr. Bloustein, Mr. Bottoms, Mr. Bloch, and Mr. Kahne.

[Pause.]

Senator CHAFEE. There appears to be a transportation problem with that panel. Mr. Bloustein, will you start?

STATEMENT OF EDWARD J. BLOUSTEIN, PRESIDENT, RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY, NEW BRUNSWICK, ON BEHALF OF AMERICAN EDUCATION ASSOCIATIONS

Mr. BLOUSTEIN. Mr. Chairman, I am Edward J. Bloustein, president of Rutgers, the State University of New Jersey, and am chairman of the National Association of American Universities and Land Grant Colleges. I am honored to present testimony today on behalf of my own university and on behalf of the American Education Associations representing America's great research institutions—the Land Grant Association, and the Association of American Universities, and the American Council on Education.

I want, Mr. Chairman, to congratulate you, Senator Danforth, and other members of the committee for supporting S. 2165—the High Technology Research and Scientific Education Act. There are a few things in the development of higher education and, indeed in the development of American industry, as important as the new partnership between American universities and American industry. This bill, I believe, goes a long way toward providing increasing support to the development and nurturing of that partnership.

Senator, you have before you my written testimony, and rather than reading that, I would like to address the two or three critical issues which the representative of the Treasury here this morning took issue with in the provisions of the bill. The first point is on permanent authorization. I and the gentlemen who testified just before me feel very strongly that this should be a permanent authorization. If fact, there is almost an inverse ratio between the duration of time that we need to undertake an experiment and how basic the research involved is. Any research that has a time span of less than 5 or 6 years is not often likely to involve very basic scientific research. I think the stability of our university budgeting system, the nature of basic research, as well as the way our scientific investigators, work all require long term commitments, university researchers involve themselves with basic problems that may take them, sometimes, decades. They require assurance of long-term support that is provided with a permanent authorization provision rather than any periodic series of periodic renewals. That simply will not do the job.

Second, I strongly urge you to think well of the extension of the program to computer sciences and engineering studies. Increasingly, in the university, any attempt to distinguish between computer science and other forms of our basic sciences just doesn't work. The most important things we do involve computer science, engineering science, the other basic sciences, and a unique mixture of them all that is important to the success of all.

Finally, I urge you to also support the credit as far as it concerns service contracts. Many of the research projects we undertake involve unique pieces of instrumentation, where the service of that instrumentation may be very, very costly, and is very, very important to the underlying success of the project.

Mr. Chairman, members of the committee, Senator Danforth, I very strongly urge you to support the bill itself, and on behalf of my colleagues in higher education, I assure you that it is one of the most important things to us, and for American industry as well.

Senator CHAFEE. Thank you, Mr. Bloustein. I will get back to a question on the service when we complete the panel in just a moment. Mr. Bottoms.

[The prepared statement follows:]

TESTIMONY BY EDWARD J. BLOUSTEIN, PRESIDENT, RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

I am Edward J. Bloustein, President of Rutgers, The State University of New Jersey, and Chairman of the National Association of State Universities and Land Grant Colleges. I am honored to present testimony today on behalf of my institution and the national education associations representing America's great research institutions: the Land Grant Association the Association of American Universities and the American Council on Education.

I want to congratulate you Mr. Chairman and Senator Danforth and the other members of the Committee who are supporting S. 2165, the High Technology Research and Scientific Education Act. The legislation, when passed will improve the innovative capacity of American industry and consequently it will make them more competitive in world markets.

I will limit my comments to the university credit that will allow companies a non-incremental 25% tax credit for support of university research. I understand that other witnesses will discuss the donations section and the revised treatment of scholarships.

It is important to say first that the success of the university credit will depend, in part, on the permanent authorization of the R&D credit. University basic research requires long term, stable funding. If company support is turned on and off because of uncertainty about the credit, neither they nor the country will receive the benefits they should from the legislation.

When legislation for the university credit was first introduced in 1980 by Congressman Vanik, it was called the Research Revitalization Act because that was its purpose, to revitalize industrial research by infusing it with the innovative, basic research findings of U.S. universities. I agree with Mr. Vanik that this tax incentive will improve both the civilian and military products of American companies.

In New Jersey, Mr. Chairman, S. 2165 will have a profound and immediate effect. Rutgers has been asked by Governor Kean to operate three academic-industrial research centers and to participate in a consortium that will operate a fourth. There will be centers in biotechnology, food technology, hazardous waste management and certain areas of materials science. The state of New Jersey will provide some funding; my institution will provide the academic scientists and graduate students, but our success, ultimately will depend on the magnitude of industrial participation in project support and scientific cooperation.

We pride ourselves on New Jersey's industrial climate. Our companies are the first to come to our aid when we need it and currently many of them support Rutgers research projects. So I think our new technology centers will receive company support. But as you know, support of basic research is a risky business. Companies have to be cautious. No one can tell at the beginning of a project if commercially usable findings will result from the time and money that is invested. S. 2165, Mr. Chairman, will reduce the risk by reducing the cost and will ensure the success of this important project.

I want to thank you for this opportunity to testify. This legislation will enhance the industry-university research relationship without federal intrusion, intervention or regulation. Speaking for my colleagues in United States Research Universities, we support most enthusiastically the permanent authorization of the R&D credit and the university credit. In addition we think the enhanced deduction for instructional equipment and company owned equipment will be very important considering the sorry shape of equipment in our institutions. Finally the improved tax treatment of scholarships conditioned on future teaching in science and mathematics is important if we are to have necessary faculty in the late 1980's and the 1990's.

STATEMENT OF GENE BOTTOMS, EXECUTIVE DIRECTOR, AMERICAN VOCATIONAL ASSOCIATION, ARLINGTON, VA

Mr. BOTTOMS. I am Gene Bottoms, the executive director of the American Vocational Association, and I am pleased to have the opportunity to speak in regard to S. 2165. Last year, I presented testimony regarding the need to extend the scientific education and technical equipment contributions to the area of vocational tech education.

I would like to get to one key point in this particular bill, S. 2165, concerning qualified organizations for scientific education equipment contributions. Basically, that limited as related to higher education will exclude the whole secondary votech system in over 14 States. That is just the primary deliverer of votech education and not the community colleges. In Minnesota and Louisiana where they use that system exclusively, those institutions were excluded because (a) they often admit students who have left high school but do not have a high school diploma or its equivalent or (b), they are sometimes administered by a K-12 board rather than a board of higher education. The second point I would like to get to on that make concerns the definition. Mr. Chafee, in your State, you have a very fine area vocational high school that, by day, serves secondary youth but, by late afternoon and evening, trains adults. Those institutions would not qualify under this contribution under this particular area. So, you can easily have an electronics program in a community college that would qualify and one that serves adults and high school students in an area vocational school that would not qualify. Now, it seems to me that California, Illinois and Michigan will come out ahead because they use the community college systems to deliver votech education. However, the States that use a combination of area schools and other kinds of institutions will be at a disadvantage. For example, Missouri has a series of area vocational schools that would be excluded under this definition.

My request is that you first, extend this coverage in S. 2165 to include the area vocational schools throughout the country. Fewer than 2,000 institutions that would be added to coverage in the bill.

Senator CHAFEE. Let me compliment you for the pinpointing of your illustration.

Mr. BOTTOMS. Second, we have tried to respond to the definition of high technology equipment that we use in both votech programs. I attached to this testimony selected occupational programs from the national classification that we think need high tech equipment. In addition, I have tried to be illustrative of the kind of high tech equipment we are talking about. We are not talking about diesel engines. We are talking about the high tech electronic components for those kind of instances that we do not now have in our laboratories. I hope that that specificity of equipment will be helpful as guidance to trying to narrow it down.

In conclusion, my request would be that you expand that definition particularly to cover those specialized institutions that do prepare this Nation's technical and skilled work force. Thank you.

Senator CHAFEE. Thank you, Mr. Bottoms. Mr. Bloch.

[The prepared statement follows:]

STATEMENT OF GENE BOTTOMS, EXECUTIVE DIRECTOR OF THE AMERICAN VOCATIONAL ASSOCIATION

CHAIRMEN CHAFEE AND PACKWOOD AND MEMBERS OF THE SUBCOMMITTEES:

I am Gene Bottoms, Executive Director of the American Vocational Association (AVA), a professional association of nearly 50,000 educators who work daily in the training of skilled workers, youth and adults, for today's and tomorrow's jobs.

I am pleased to be here with you today to discuss Senate Bill 2165 — "The High Technology Research and Scientific Education Act of 1983". The American Vocational Association is supportive of S. 2165, however, we would like to see a modification made in the coverage of eligible institutions.

I commend Senators Danforth, Bentsen and Chafee for introducing a bill that would not only assist companies in planning their long term research and development (R&D) projects, but would also help institutions acquire high-technology, state-of-the-art equipment by offering an expanded charitable deduction for donations of scientific equipment.

THE NEED FOR HIGH TECHNOLOGY EQUIPMENT IN VOCATIONAL SCHOOLS

The application of advanced technology with its new equipment to the workplace is changing the knowledge and skills that workers need. As seriously, it is rendering a portion of the primary mechanism to train these workers - our nation's vocational-technical education programs - obsolete. Curriculum, laboratory equipment and instructors have become out-of-date for the modern workplace and a major effort utilizing the resources of both the public and private sector will be needed to rebuild this important national infrastructure.

The rapid rate at which technology is advancing is not the only reason for this situation. The cutback in federal support for vocational education, compounded by tightened state and local budgets, has created a situation where institutions that deliver vocational-technical education in this nation do not have the necessary resources to modernize programs in line with requirements imposed by expanding technology in the workplace.

The seriousness of the problem is apparent across the nation. The senators who conceived this bill have recognized that a closer link between education and the private sector, especially in high-technology areas, can help institutions acquire high cost state-of-the-art equipment. However, there are two major changes in the bill which I would like to see made.

PROPOSED CHANGES TO S. 2165

The bill, in its present form, defines a "Qualified Educational Organization" as one which is described in section 170 of the Internal Revenue Code as:

> ...an educational organization which normally maintains a regular faculty and curriculum and normally has a regularly enrolled body of pupils or students in attendance at the place where its educational activities are regularly carried on...

and that is an institution of higher education (as defined in section 3304 (f)). This section states than an institution of higher education means an educational institution in any State which—

> (1) admits as regular students only individuals having a certificate of graduation from a high school, or the recognized equivalent of such a certificate;
> (2) is legally authorized within such State to provide a program of education beyond high school;
> (3) provides an educational program for it which awards a bachelor's or higher degree. or provides a program which is acceptable for full credit toward such a degree, or offers a program of training to prepare students for gainful employment in a recognized occupation; and
> (4) is a public or other nonprofit institution.

Excluded from these definitions are public area vocational education schools (as defined in section 195 (2) of the Vocational Education Act of 1963 (20 U.S.C. 2461)). I am proposing that this bill be expanded to cover three types of area vocational-technical schools which include:

(A) specialized high schools used exclusively or principally for the provision of vocational education to individuals who are available for study in preparation for entering the labor market;

(B) technical institutes or vocational schools used exclusively or principally for the provision of vocational education to individuals who have completed or left high school and who are available for study in preparation for entering the labor market; or

(C) departments or divisions of junior colleges, community colleges or universities operating under the policies of the State board and which provide vocational education in no less than five different occupational fields leading to immediate employment but not necessarily leading to a baccalaureate degree, if, in the case of a school, department, or division described in subparagraph (B) or this subparagraph, it admits as regular students both individuals who have completed high school and individuals who have left high school.

Many fine programs are conducted at area vocational-technical schools which can be secondary, postsecondary or a combination of both levels. Their needs for high-technology equipment are the same or even greater than our four-year institutions and community colleges since many of them charge little or no tuition for vocational training.

An example of an area vocational technical school is the Owen Sabin Skills Center which serves approximately 1,000 students in grades 9-12 in North Clackamas, Oregon. Students attend the Skills Center for 2-3 periods a day and receive skill training in an occupational area. The remainder of their school day is spent at their home school in academic classes. The three high schools in the North Clackamus School District (13,000 enrollment) all send students to the Owen Sabin Skills Center. Businesses and industries have made contributions of equipment to the school and have helped decrease some of the burden of high equipment costs. However, if tax credits were given to these contributors, the equipment donations would be greater.

Area vocational-technical schools offer quality vocational programs in many fields. However, I am not suggesting that this bill cover all programs and equipment at area vocational schools, or other institutions already covered in S. 2165. For the purposes of this bill, I am proposing to limit the occupational programs to which equipment can be donated and to narrow the type of equipment that would qualify for tax credits.

The occupational programs to which high-technology equipment could be donated under the provisions of this bill would be limited to programs in computer and informational sciences, engineering related technologies, transportation and industrial repair, agricultural mechanics, drafting and metal precision trades. These programs train individuals for our technical and skilled workforce in the jobs of the future.

Further, I propose to limit the definition of high-technology equipment to: computers and associated display, printer and disc drive hardware, other electronic and technical equipment which is reprogrammable, education software, installation costs, replacement parts and service contract for computers, test equipment, mock-ups, simulators, trainer test kits and aids to support the equipment. This list does not include tractors used in agriculture mechanics but, rather, focuses on such things as electronic ignition and fuel-injection systems and air/electronic planting devices. Similarly, biomedical equipment under electrical and electronic technologies would include ultrasonic cardiac monitors, Gammex chest-align systems, etc. and not all types of medical equipment.

Appendix A of my remarks contains a list of qualifying vocational-technical programs and examples of high-technology equipment that would qualify for donations under this bill.

In narrowing both the range of high-technology equipment and the occupational programs covered by this bill, the revenue loss to the government from this piece of legislation is substantially reduced. By including area vocational-technical schools with postsecondary institutions, community colleges and other institutions of higher education in this bill, the federal government will be helping the primary delivery systems of skilled and technical training in this country. We would like this tax deduction for businesses and industries extended to all those institutions primarily responsible for training adults just entering the workforce and those seeking retraining in high-technology fields.

GENERAL

1. Clarification of high-tech items
    a. Electronic devices which can be reprogrammed are considered high tech.
    b. Computer frame age is not the major indicator provided state-of-the-art software can be used. Typically, the difference is in capacity and speed which is not critical to training.
    c. Single purpose dedicated electronic devices are not necessarily high-tech unless they are in combination with other devices which makes the whole high tech.
2. In the lists of items there are generic components common to all, such as:
    a. Software for computer applications
    b. Vender training services
    c. Test equipment needed to support systems
    d. Mock-ups, simulators, trainers test kits and aids to support equipment.
3. This list is not all inclusive but includes typical examples.

PROGRAMS

1. Agriculture Mechanics
    a. Electronically controlled turbo-boost systems
    b. Electronic ignition and fuel-injection system
    c. Air/Electronic planting devices
    d. Electronically controlled systems or components
    e. Electronically controlled pumps and irrigation systems or major components
    f. Micro-Computers
2. Computer and Information Science
    a. Computer programming
        (1) Micro-computers to teach systems, programming and literacy
        (2) Mini computers to expand programming experience to advanced languages such as COBOL, RPG, etc.

b. Scientific Data

(1) Micro-computers - programming and literacy

(2) Mini-computers - to teach advanced scientific data processing

3. Engineering Related Technologies

a. Architectural technologies

(1) Architectural Design and Construction

(a) Micro-computer - for CAD drafting

(b) Mini-computer - advanced CAD drafting and Design

(c) Electro-optics and laser measuring equipment for alignment techniques

(2) Architectural Interior Design

(Same as above)

b. Electrical and Electronic Technologies

(1) Computer technology

(a) Assorted computers to teach basic construction, layouts, theory of operation, troubleshooting and repair.

(b) Post-processing devices to teach concepts, capabilities, construction, layouts, theory, troubleshooting and repair.

(c) Assorted programmable logic controllers

(2) Electrical Technology

(a) Programmable logic controllers

(b) Electric interface components such as DC stepping motors

(3) Electronic Technology

(a) Assorted computers

(b) Programmable logic controllers

(c) Converters such as D to A and A to D

(d) Laser optic equipment including consumer audio, visual, measuring devices, acceleration and velocity devices, welding and cutting equipment.

(4) Laser Electro-Optic

- (a) Consumer devices, laser vidio-disc and laser disc stereo
- (b) Laser optic communication equipment
- (c) Laser measuring and alignment devices
- (d) Velocity and acceleration measuring devices
- (e) Laser medical devices

(5) Biomedical Equipment Technology

- (a) Ultrasonic Cardiac Monitor
- (b) Computerized Axial Tomography Scanner
- (c) Position Emission tomography scanner
- (d) Laser controlled microprocessor blood counter
- (e) Microprocessor controlled and monitored spirometer (anesthesia)
- (f) Microprocessor controlled infusion
- (g) Microprocessor based pulmonary function analyzer
- (h) Multi-programmable pacemaker with memory
- (i) Gammex chest-align system
- (j) SRT Real-time Ultra-Sound Scanner
- (k) Vascular diagnostic system
- (l) Real-time Imaging system

(6) Computer Servicing Technology
(See Computer Technology above)

(7) Electromechanical Technology

- (a) Assorted micro and mini computers
- (b) Programmable logic controllers
- (c) Assorted computer interface devices such as DA and AD converters
- (d) Electrohydraulic and electropneumatic components such as electrohydraulic valves

- (e) Various types of robots and devices

(8) Instrumentation Technology

- (a) Programmable logic controllers
- (b) Computers to drive computer-controlled automated systems and processes
- (c) Components of PLC and computer-controlled systems

(9) Environmental Control Technology
(Air Conditioning, Heating and Refrigeration)

- (a) Electronic control systems or components
- (b) Programmable logic controllers
- (c) Computers to drive computer-controlled systems
- (d) Computer controlled systems or major components

(10) Air Polution Control

- (a) Electronic air sampling devices

(11) Energy Conservation and Use

- (a) Electronically-controlled waste water heat exchange system
- (b) Solid waste conversion systems
- (c) Electronically controlled air-to-air heat exchange system
- (d) Residential
  - . Waste water converters
  - . Air-to-air converters
  - . Water heater and furnace exhaust recovery units
  - . State-of-the-art heating and cooling systems to include electronic controls

(12) Solar Heating and Cooling

- (a) State-of-the-art collectors to include gas-filled tube collectors, sun-tracking collectors and storage media which change physical states.

- (b) Electronic cycle and control systems

(13) Water and Waste Water Control

- (a) Electronic sampling devices
- (b) Electronic analysis systems

(14) Industrial Production

(15) Manufacturing Technology

- (a) Micro-Computers-basics and literacy
- (b) Mini-Computers-advanced languages and CAD/CAM
- (c) Computer peripherals to include digitizer, plotter and printer
- (d) Numerical control devices to include CNC machines (milling, turning, punching, forming and EDM)
- (e) Robots, robot support devices (conveyors, rotary magazines, etc.)
- (f) Materials test equipment (ultrasonic, spectrographic, x-ray and others)
- (g) Measuring equipment to include 3-axis electronic, laser and laser optic
- (h) Welding equipment to include friction, laser and electron beam
- (i) Grinding equipment to include electro-chemical machines
- (j) Computer controlled heat treat ovens and plastics autoclave
- (k) Small powdered-metal furnace/presses, with controlled atmosphere and computer controls

(16) Plastic Technology

- (a) Computer-controlled blending devices
- (b) Computer-controlled injection devices
- (c) Computer-controlled autoclaves
- (d) Ultrasonic and x-ray test equipment
- (e) Friction welding equipment

(17) Welding Technology

- (a) Laser cutting equipment
- (b) Laser welding equipment
- (c) Friction welding equipment
- (d) Electro beam welding equipment

(18) Quality Control Technology

- (a) Ultrosonic tester
- (b) 3-axis electronic measuring equipment
- (c) Laser optic measuring equipment
- (d) Eelctronic imaging devices
- (e) Micro-Computers

(19) Mechanical and Related Technologies

- (a) Laser optic measuring equipment
- (b) 3-axis electronic measuring equipment
- (c) Ulterasonic non-destructive test equipment
- (d) Central air-data computer systems or components

(20) Agricultural Equipment Technology
(See Agricultural Mechanics above)

(21) Automotive Technology

- (a) Electronic turbo controlled systems (and engines)
- (b) Electronic ignitions (and engines)
- (c) Electronic fuel-injection systems (and engines)
- (d) Central computer systems

(22) Marine Propulsion Technology
(See automotive above, except central computer)

(23) Mechanical Design

- (a) Micro-Computers
- (b) Mini-Computers
- (c) Materials test equipment to include ultrasonic and spectrographic

- (d) Small electronically controlled autoclave
- (e) CNC machines to include mills, lathes, presses and EDM machines and controls for computer-controlled manufacturing techniques.
- (f) 3-axis measuring equipment
- (g) Small, controlled-atmosphere, electronically controlled furnace to teach modern metalurgy (Should hve capability of teaching powdered metal techniques, press integral to furnace and possibly localized supplementary heat devices)
- (h) Robots and robot interfaced automated equipment

(24) Heating Air Conditioning and Refrigeration Mechanics, General

- (a) Programmable logic controllers
- (b) Computer controlled systems or components
- (c) PLC components
- (d) Computers to drive computer-controlled systems

(25) Industrial Machinery Maintenance and Repair

- (a) Micro-Computers-basics and literacy
- (b) Mini-Computers-advanced CAD/CAM
- (c) Programmable logic controllers
- (d) Interface devices
- (e) CNC machines
- (d) Laser-optics measurement and alignment equipment
- (e) Industrial robots

(26) The following items are generic to most engineering related technologies

- (a) VOM
- (b) Isolation transformer
- (c) Function generator
- (d) Combination Hi/Lo AC/DC Power Supply

(e) Digital multimeter

(f) Signal generator

(g) Curve tracer

(h) Transistor tester

(i) RCL (Impedence) bridge

(j) Dual trace oscilloscope

(k) Scope probes

(l) Logic probes

(m) Current tracer

(n) Logic comparator

(o) Data analyzer

(p) Spectrum analyzer

(q) Earth satellite receiving station

(r) Digital counters

(s) Programmable power supply

(t) ROM programming system

(u) Programmable digital multimeter

(v) CNC floppy disk programming center

(w) Electronic Microscope

(x) Computer assisted drafting system

(y) Tensel and hardness testers

(z) CNC machines and controls

4. Vehicle and Mobile Equipment Mechanics and Repairers
    - (a) Aircraft Mechanics (See Aeronautical Technology)
    - (b) Automotive Mechanics (See Automotive Technology)
    - (c) Small Engine Repair

      Small engines with breakerless ignition

5. Drafting, General
    - (a) Micro-Computer-basics, literacy, 2 dimension CAD
    - (b) Mini-Computer-advanced CAD, 3 dimensional drawings and advanced geometric analysis

6. Architectural Drafting

   (Same as above)

7. Civil Structural Drafting

   (Same as above)

8. Electrical/Electronics Drafting

   Software developed specifically for electrical/electronic CAD; otherwise, same as above

9. Mechanical Drafting

   Software developed specifically for mechanical drafting

10. Machine Tool Operation/Machine Shop
    - (a) CNC machines to include mills, lathes, presses and EDM machines
    - (b) Off-line machine programming equipment
    - (c) Electronic, 3-axis measuring equipment

11. Welding, Brazing and Soldering
    - (a) Computer-controlled automatic cutting and welding equipment
    - (b) Laser welding and cutting equipment
    - (c) Robots for various welding applications
    - (d) Electron beam welding equipment

      Bench-type, digital measuring devices

12. Metal Fabrication
    - (a) CNC controlled metal cutting, punching, forming and welding machines
    - (b) Off-line machine programming equipment
    - (c) Electronic, 3-axis measuring equipment
    - (d) Electronic, bench-type gaging equipment
    - (e) Welding robots
13. Sheet Metal

    (Same as above except these additions:)
    - (a) CNC drilling/riveting equipment
    - (b) Robots for assembly, riveting and spot welding
    - (c) CNC devices for spot welding
14. Tool and Die Making

    (See Machine Tool Operator above, plus)
    - (a) High speed, high precision mills such as the Bostomatic
    - (b) High precision wire EDM equipment
    - (c) Laser-optics for alignment and checking of large fixtures

STATEMENT OF ERICH BLOCH, CHAIRMAN OF THE BOARD, SEMICONDUCTOR RESEARCH CORP., WASHINGTON, DC

Mr. BLOCH. Thank you. My name is Erich Bloch, and I am the chairman of the board of the Semiconductor Research Corp. I am also vice president of Technical Personnel Development of IBM. But I am appearing today on behalf of the SRC. I welcome the opportunity to voice my organization's strong support for the provisions of S. 2165 to make permanent the tax credit for research and development; extend the present tax credit for corporate payments to universities for basic research and improve the present deduction for corporate donations of scientific and technical equipment to colleges and universities and the servicing of that equipment. SRC is a not-for-profit, tax-exempt organization with 26 member companies of diverse sizes. They include semiconductor manufacturers, users of semiconductors and suppliers of materials and equipment to this industry. The SRC was formed to fund basic research in universities in fields important to semiconductors by pooling company fees and contacting with universities throughout the country.

SRC's current budget is close to $12 million, and the SRC has been able to fund 50 proposals this year from 32 universities. I have attached to my written statement a list of the universities and of the member companies, many of which are located in the States represented by members of this committee. The R&D tax credit was an important factor in the decision to proceed with the creation of the SRC in 1981; because the credit created a positive environment for basic research and because of SRC's ability to use the credit as a possible inducement to attract corporate members to fund university-based activities at a point in time when many of its members were undergoing difficult economic times. The continued growth for semiconductor, computer, and telecomnunications industries will only be possible if advances are made in the scientific fields that underlie its technologies. Yet this crucial need for expanded basic research comes at a time when U.S. basic research expenditures has been suffering from a long decline. Moreover, because of research and technological progress in our industries, the costs to universities in educating future scientists to perform the basic research has increased.

The response of SRC member companies to the existing R&D tax credit has been substantial. However, we strongly believe that a great potential exists for expanding the university research of the SRC, if the present law is expanded and enhanced. The present R&D credit treats funding of university-based research the same as the costs of in-house research. Thus, no particular incentive exists to switch research projects from in-house development to the university based research. A real need exists to provide a larger incentive for corporate members to fund a larger part of university-based research. Thank you very much.

Senator CHAFEE. Thank you very much, Mr. Bloch.

Mr. Kahne.

[The prepared statement follows:]

WRITTEN STATEMENT OF ERICH BLOCH

My name is Erich Bloch. I am Chairman of the Board of the Semiconductor Research Corporation (SRC) and am also Vice President-Technical Personnel Development, of International Business Machines Corporation. I am appearing today on behalf of SRC.

I welcome this opportunity to appear before the Subcommittee today to voice SRC's strong support for the provisions of S. 2165 which make permanent the tax credit under present law for research and development (R&D) activities, broaden the present tax credit for corporate payments to universities for basic research, and broaden and improve the present enhanced deduction for corporate donations of scientific equipment to colleges, universities, and post-secondary vocational schools.

I. FORMATION AND PURPOSES OF SRC: ROLE OF THE R&D CREDIT

SRC is a non-profit, tax-exempt organization whose 26 members are companies of diverse size which manufacture finished semiconductor devices for sale, manufacture and purchase finished semiconductor devices for use in manufacturing other products, or manufacture equipment or materials for use by the semiconductor industry. Attached to this testimony is a list of current SRC members. The essential purpose of SRC is to promote basic research and scientific study by colleges and universities in the fields of engineering, mathematics, and the physical sciences underlying semiconductor technology. SRC operates by pooling membership fees and then contracting with universities in various regions of the country for the creation of major research centers as well as for specific research projects. SRC's annual budget in the current year for university research projects is in the range of $12 million. This amount substantially increases total available funding for basic research in semiconductor technology. The semiconductor industry in the past has been able to spend only 3 to 5 percent of its R&D budget on basic research -- amounting to only $35-50 million annually; additional NSF funding for such research in 1982 was $7.5 million.

In response to its initial solicitation of research proposals from universities, SRC received over 150 proposals from 52 universities. These universities included Cornell and University of Rochester in New York, Rutgers and Princeton in New Jersey, the Universities of Pennsylvania, Pittsburgh and Penn State, the Universities of Iowa, Minnesota, Montana State, Colorado, Oklahoma, Maine, and the University of California at Berkeley. As will be discussed in more detail later, SRC has to date been able to fund 50 proposals. A list of these contracts -- awarded to colleges and universities throughout the United States -- is attached for your reference.

The idea for the creation of SRC was developed in 1981, in the wake of enactment of the R&D tax credit. The R&D credit was an important factor in the decision to proceed with the formation of SRC -- both because of the positive environment for R&D and university basic research which existed with the enactment of the credit and because of SRC's ability to use the tax credit as a positive sales tool to attract corporate members willing to fund university basic research activities. SRC was formed by industry to address a number of fundamental problems in the current state of university scientific education and of basic research in the fields underlying semiconductor technology. However, our efforts to date represent only a beginning: there is an ever-increasing need for substantially-broadened corporate support of university basic research and scientific education. S. 2165 provides fundamentally necessary incentives for corporate taxpayers to address these critical problems.

II. CRITICAL DEFICIENCIES CONTINUE TO EXIST IN BASIC RESEARCH AND UNIVERSITY SCIENTIFIC EDUCATION: THE NEED FOR AN ENHANCED TAX INCENTIVE FOR CORPORATE FUNDING OF UNIVERSITY BASIC RESEARCH

The semiconductor industry, and the closely-related computer and telecommunications industries, recently have experienced tremendous and rapid growth in product innovation and market development. Future growth in semiconductor and computer technology will be able to continue only if corresponding advances are made in the foundations of knowledge in the fields of engineering and physical science which underly such semiconductor and computer technology. Yet, this crucial need for expanded basic research comes at a time when basic research in this nation has been suffering from a long decline. According to the National Science Foundation, U.S. industry now spends only 4.4 percent of every research dollar on basic research, down from 7.6 percent in 1960. University basic research has been a major casualty of this declining emphasis on civilian basic research because over 60 percent of all basic research is conducted at universities. Industry today is the source of a scant 4.1 percent of R&D dollars brought to universities, down by over 30 percent from 1960. (*See* National Science Foundation, *Science Indicators*.)

In the past fifteen years, the semiconductor, computer and telecommunications industries have experienced a dramatic surge in technological progress. As a result of this surge, the costs to our universities of educating future scientists and engineers and of performing the basic research necessary for continuing technological progress have increased rapidly. Both the increasing complexity of the technology and the need for sophisticated capital equipment which is subject to early obsolescence have increased costs substantially. Frequently, the financial resources necessary to conduct such long-term research are beyond the capacity of individual companies or universities as are the human skills to perform the research. Accordingly, an industry-wide approach through cooperative vehicles such as SRC will be necessary to provide adequate funding for basic research in scientific fields underlying technology and product development.

Such an industry-wide approach is not only necessary but offers major advantages as well. It provides an industry-wide perspective regarding the past and future pattern of development of semiconductor, computer, and telecommunications technology and the various research problems and opportunities which lie in the forefront of such developing technology. It also promotes cooperation by industry with universities in the definition, conduct, and support of university basic research projects, thereby providing university researchers with a clearer sense of the direction in which the technology should be moving and the kinds of research problems and activities that are particularly important to industry. We at SRC strongly feel that both the industry and the universities realize very substantial benefits from this expanded scale of university basic research activities and of industry-university cooperation. This cooperation in no way detracts from the time-proven principle of academic freedom.

Not only is there industry and university benefit from the expansion of knowledge through expanded university basic research efforts, but, just as importantly, the universities receive substantial resources to improve their scientific education and training programs. At colleges and universities, education in mathematics, engineering, and the physical, biological and computer sciences has suffered from a chronic shortage of faculty and a lack of up-to-date scientific equipment upon which the students and faculty can learn and perform research. Universities not only face great difficulty in stretching tight budgets to compete with private firms for graduate-level engineers for faculty employment, but they also face difficulty in attracting high caliber faculty because of the antiquated laboratory facilities available for teaching and because of teaching overload. The result of these chronic shortages of university science faculties and antiquated facilities is an inadequate supply of scientifically-skilled manpower, especially in critical areas such as computer science, electrical engineering, and mechanical engineering. Japan, with a fraction of the U.S. population, is currently producing more electrical engineers from its colleges and universities than is the United States.

A fundamental characteristic of the high technology electronics companies is that their competitiveness, in both national and international markets, is a function of the competence and creativity of their employees. The heart of the electronics industry is research and development, which is almost exclusively a human activity requiring skilled and imaginative scientists, engineers, and technicians. For many companies -- particularly in the semiconductor industry -- manufacturing also is an activity that requires highly-trained and skilled employees. Thus, it is not surprising that high technology electronics companies view skilled and highly-motivated employees as the company's single most important asset. For this reason, industry is very concerned about the current critical shortage of engineers and scientists graduating from our nation's institutions of higher education.

Increased corporate funding of university basic research will provide the universities with resources to attract scientific faculty and to modernize laboratory facilities. These modernized facilities, in turn, can further help attract high caliber faculty by providing more up-to-date laboratories within which the faculty member can perform his or her research. In addition, the university basic research projects conducted on behalf of industry will themselves constitute a significant attraction to new faculty by providing the opportunity to work on a well-funded project examining research problems and issues which are on the very forefront of the scientific fields underlying industrial technology. To the extent these faculty shortages are remedied and the scientific facilities are modernized, the supply of scientists, engineers, and scientifically-skilled manpower will be increased, and a pool of highly-trained talent will be available not only to the high technology electronics industry but to a broad range of industries across this nation as well.

III. SRC'S EXPERIENCE WITH THE EXISTING R&D CREDIT DEMONSTRATES THAT INDUSTRY WILL RESPOND TO TAX INCENTIVES FOR CORPORATE SUPPORT OF UNIVERSITY BASIC RESEARCH

SRC's experience, we believe, helps demonstrate that industry has responded to the incentives contained in the present R&D tax credit for corporate support of university basic research and will respond on an even greater scale to the broadened university research credit as contained in S. 2165. In the two years since SRC was formed, its membership has grown from ten companies to twenty-six companies, and its budget for its activities has increased from approximately $6 million in 1982 to over $15 million for 1984.

As I mentioned, in SRC's first full year of operation in 1982, it received over 150 proposals from 52 universities from around the nation in response to SRC's initial request for university basic research proposals. SRC has awarded 50 contracts for major research "centers-of-excellence", major research programs, and individual university research projects. Awarded centers-of-excellence and major programs include Cornell, University of California at Berkeley and Carnegie-Mellon, a consortium of North Carolina universities (principally, Duke, University of North Carolina, and North Carolina State), M.I.T., Clemson, Stanford, Rensselaer, and University of California at Santa Barbara. SRC plans to fund a total of at least eight to ten more of these broad-scale, major research centers at universities over the next several years. University basic research activities to be conducted at these centers on behalf of SRC will include research into design of micro-structures, properties of silicon material, computer-aided design and automation of design, lithography, beam processing, fault tolerance, micro-packaging and cooling, three-dimensional silicon structures, and manufacturing systems research.

As an example of the research undertaken at these centers, Berkeley and Carnegie-Mellon are to receive a total of

$1.75 million in SRC funding for joint research into computer-aided design of integrated circuits. Both of these institutions have previously pioneered in the design of complex systems in which the complexity of the largest computer system is condensed onto a 0.1 square inch chip. The growth in complexity of these computer systems is challenging the current capability of industry to reduce integrated circuits onto silicon chips. Unless very significant advances are made in the design process, the continued ability to reduce these complex integrated circuits onto silicon chips will be severely hampered. U.C.-Berkeley and Carnegie-Mellon will coordinate their programs in a broad research effort to develop the required new generations of design tools.

SRC has adopted an explicit policy of distributing a substantial number of its contracts for major research centers and individual research projects on a broad geographical basis among colleges and universities whose scientific research programs -- while perhaps not as well-known or prestigious as a Harvard, M.I.T., or Berkeley -- are nonetheless of outstanding caliber. As the attached list of all institutions which have to date received SRC contract awards indicates, we have found that there is extremely capable scientific research work being undertaken at these regional colleges and universities. Moreover, it is SRC's view that complex basic research problems may be more readily solved when there are a number of educational institutions participating, bringing the diverse views of a number of researchers to bear on the problem.

Perhaps more importantly, the establishment of high technology research centers and the awarding of individual research contracts at universities located in a variety of regions of this nation helps provide a basis for the geographical dispersion of high technology companies and industries. As these university research efforts expand and become established, high caliber faculty and students are attracted which in turn provides a foundation for high technology industrial development in the region. The pattern of high technology industry growing around research institutions -- such as Silicon Valley around Stanford and Berkeley and Route 128 in Massachusetts around Harvard and M.I.T. -- can be applied to many other areas of the country. With increased university research efforts, a local source will exist for scientifically-skilled manpower. Moreover, the research capability of the university will offer valuable opportunities for university-industry cooperation on research projects and will serve to spotlight the region to attract still more high technology enterprises and talented manpower from other areas of the nation. Thus, the continued development across the nation of university basic research in the scientific fields underlying semiconductor, computer, and telecommunications technology holds out important promise for the development of an industrial base of high technology in a variety of geographical regions, providing well-paying new jobs for skilled employees at all levels.

SRC's efforts, with the benefits set forth above, have been accomplished in significant part because of the existence of the R&D tax credit. If the credit is not extended, the incentive for companies to become members and expand their contributions to SRC will diminish. Accordingly, SRC strongly urges that S. 2165 be promptly enacted this year to make the R&D credit a permanent part of the Internal Revenue Code. Just as individual companies undertaking in-house R&D projects today in response to the R&D credit need assurances that the credit will still be in existence at the end of the three- to five-year project, so, too, SRC and the universities conducting research on its behalf need the certainty that the tax incentives which helped to give rise to necessary corporate funding will continue to exist for both new projects and projects currently being undertaken.

IV. THE NON-INCREMENTAL CREDIT MECHANISM OF S. 2165 IS AN IMPORTANT STEP TO ENCOURAGE BROADER CORPORATE FUNDING OF UNIVERSITY BASIC RESEARCH

While the response of SRC member companies under the existing tax credit incentive has been substantial, we strongly believe that there is great potential for a broad expansion of SRC's funding of university research if the tax incentives for corporate support of such research were enhanced. The present tax credit under I.R.C. § 44F, by treating corporate payments to universities for basic research in the same manner as a contract payment for product development, provides no particular incentive for a corporation to shift research projects from in-house operations oriented toward applied research and product development to university basic research. Because the current R&D credit is calculated on an incremental basis using a rolling base period which includes university basic research payments as well as the company's in-house product development R&D expenditures, dollars paid by the company to a university for basic research increase a company's threshold for obtaining the credit over the next three years by increasing the base period amounts applicable in those years, and thereby reduces the amount of available R&D credit in those years. Since university basic research has less direct immediate commercial value to any company than does in-house applied research and product development, there is a clear need for a differentially larger incentive if corporate taxpayers are to be persuaded to apply a larger part of their R&D budgets to fund university basic research.

We at SRC believe that S. 2165 adopts the correct approach to such a differentially larger tax incentive for corporate support of university basic research. The bill creates a flat, non-incremental credit for a corporation's payments to universities for basic research that are in excess of a fixed "maintenance-of-effort" level, which is based upon 1981 through 1983 levels of the company's university research spending and of its R&D spending in general. This maintenance-of-effort minimum ensures that the new, non-incremental university research credit will be available only to corporations that increase their funding of university research above their historical levels of such support. The percentage-of-research budget floor also prevents a windfall to companies that thus far have been inactive in supporting university basic research.

One important advantage of making the university research credit non-incremental when a company's university payments exceed a fixed historical level is that the credit continues to provide an incentive for the company to make such payments in bad years as well as good years. In a volatile industry like the high technology electronics industry, many companies such as semiconductor manufacturing companies must endure severe swings in earnings. In times of adverse circumstances there is a temptation for a company to cut support of university research; cutting university research funding is often simpler and less painful than laying off employees or closing company R&D or manufacturing facilities. In these circumstances a very substantial effort may be required just for the company to maintain its university research support at previous years' levels or to achieve a modest increase in such funding. Under S. 2165, so long as the company's university research payments exceed the fixed historical base, the non-incremental nature of the credit will continue to provide a significant incentive for the company to make payments for university research even in bad times.

V. CONCLUSION

In sum, SRC believes that the R&D credit must be made permanent as provided in S. 2165. Moreover, the differentially larger tax credit for corporate support of university basic research set forth in S. 2165 should be enacted to provide a substantial and fundamentally necessary incentive for corporations to increase their funding of university research activities. Such increased funding will permit the United States to continue to achieve breakthroughs in the foundations of basic scientific knowledge and will provide colleges and universities with the resources to attract scientific faculty and to modernize laboratory facilities.

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00001  82-11-001 SEMICONDUCTOR RESEARCH CORP PROGRAM OF MICROSCIENCE & TECHNOLOGY  CORNELL
00002  82-11-002 PERFORMANCE ENHANCEMENT OF VLSI THROUGH THE USE OF ADVANCED       STANFORD
00003  82-11-003 TRANSFER OF SOFTWARE ENGINEERING METHODOLOGY TO VLSI DESIGN       UNC
00004  82-11-004 LOW RESISTANCE OHMIC CONTACTS FOR VLSI TECHNOLOGY                 MINNESOTA
00005  82-11-005 AN INVESTIGATION OF MULTILEVEL INTERCONNECTION & REACTIVE ION     MISSISSIPPI STATE
00006  82-11-006 THEORETICAL & EXPERIMENTAL INVESTIGATIONS OF THERMAL & ACCELERATED ILLINOIS
00007  82-11-007 SRC-CMU RESEARCH CENTER FOR COMPUTER-AIDED DESIGN                 CARNEGIE-MELLON
00008  82-11-008 SRC-CAL/BERKELEY COMPUTER-AIDED DESIGN PROGRAM                    CAL/BERKELEY
00009  83-01-001 PHYSICS & MODELING OF HETEROSTRUCTURE SEMICONDUCTOR DEVICES       PURDUE
00010  83-01-002 VLSI CIRCUIT LAYOUT                                               COLUMBIA
00011  83-01-003 DEVELOPMENT OF A DESIGN AUTOMATION SYSTEM FOR SPEED-INDEPENDENT   IOWA
00012  83-01-004 INVESTIGATIONS OF MECHANICAL-ENVIRONMENTAL INTERACTIONS IN VLSI   GEORGIA TECH
00013  83-01-005 ULTRA-COMPACTION ALGORITHMS FOR SYMBOLIC VLSI LAYOUTS             MCNC
00014  83-01-006 PHYSICS & TECHNOLOGY OF MUTILEVEL INTERCONNECTIONS & CONTACTS FOR STANFORD
00015  83-01-007 CHEMICAL VAPOR DEPOSITION OF REFRACTORY METALS & THEIR SILICIDES  ARIZONA
00016  83-01-008 CHARACTERIZATION & OPTIMIZATION OF INCOHERENT LIGHT & CW LASER    NOTRE DAME
00017  83-01-009 COMPLEMENTARY MESFET DEVICES FOR VLSI TECHNOLOGY                  STANFORD
00018  83-01-010 THERMAL NITRIDATION OF SILICON & SILICON OXIDES                   PENN STATE
00019  83-01-011 POLYSILICON IN ADVANCED INTEGRATED CIRCUIT PROCESSES              CARNEGIE-MELLON
00020  83-01-012 THE BIPOLAR TRANSISTOR STRUCTURE & THE SPACE-CHARGE-LIMITED LOADS ARIZONA
00021  83-01-013 DESIGN VERIFICATION & TESTING OF VLSI CIRCUITS                    ILLINOIS
00022  83-01-014 DESIGN OF TESTABLE VLSI CIRCUITS                                  ILLINOIS
00023  83-01-015 VERY LOW TEMPERATURE SILICON EPITAXY                              MINNESOTA
00024  83-01-016 MOS VLSI AT LOW TEMPERATURES                                      VERMONT
00025  83-01-017 A COMPUTER AIDED DESIGN METHODOLOGY FOR ANALOG LSI/VLSI           TEXAS A&M
00026  83-01-018 PROCESS-INDUCED RADIATION EFFECTS IN SMALL-DIMENSION MOS DEVICES & YALE
00027  83-01-020 A THREE DIMENSIONAL VLSI DEVICE SIMULATOR                         ARIZONA STATE
00028  83-01-021 AN INVESTIGATION OF MOLECULAR BEAM EPITAXY SILICIDES FOR VLSI     UCLA
00029  83-01-022 ON-LINE TESTABLE VLSI PROCESSORS                                  CARNEGIE-MELLON
00030  83-01-023 VLSI DIGITAL SIGNAL PROCESSORS                                    SOUTH CAROLINA
00031  83-01-024 APPLICATION OF ACOUSTIC MICROSCOPY TO THE EXAMINATION OF INTEGRATED MINNESOTA
00032  83-01-025 PERFORMANCE & FAILURE ANALYSIS OF MICROELECTRONIC DEVICES BY      UNC
00033  83-01-026 PLASMA & REACTIVE-ION ETCHING WITH FLUORINE BASE COMPOUNDS        PENN STATE
00034  83-01-027 STUDIES OF HIGH-CONDUCTIVITY SILICIDE METALLIZATIONS FOR VLSI     WISCONSIN
00035  83-01-028 CAD TECHNIQUES FOR VLSI LAYOUT                                    ROCHESTER
00036  83-01-029 LASER REPAIR OF TRANSPARENT VLSIC MASK MICROFAULTS                USC
00037  83-01-030 STUDIES OF THE RELIABILITY PHYSICS OF SILICON VLSI TRANSISTORS    ILLINOIS
00038  83-01-031 STUDIES OF THE ORIGIN OF Si/SiO2 INTERFACE STUDIES                STANFORD
00039  83-01-032 HIERARCHICAL SILICON COMPILATION                                  BROWN
00040  83-01-033 THREE-DIMENSIONAL CIRCUITS & SYSTEMS TECHNOLOGY                   MIT
00041  83-01-034 AN EVALUATIVE PROGRAM FOR ASSESING THE UTILITY OF CLUSTER IONS IN JOHNS HOPKINS
00042  83-01-035 VLSI ARRAYS: APPLICATIONS & LAYOUT TECHNIQUES                     ILLINOIS
00043  83-01-036 THIN INSULATORS & THEIR INTERFACES IN METAL/INSULATOR/SEMICONDUCTOR YALE
00044  83-01-037 THE OPTIMIZATION OF POLYSIL EMITTERS                              FLORIDA
00045  83-01-038 EFFICIENT METHOD FOR SIMULATING MOS INTEGRATED CIRCUITS & IT'S    ARIZONA
00046  83-01-039 INTERFACE DEFECTS IN MUTILAYER CERAMIC SUBSTRATES                 CORNELL
00047  83-01-040 RESEARCH IN INTEGRATED CIRCUIT MANUFACTURING TECHNOLOGY           MCNC
00048  83-01-041 ADVANCED BEAM SYSTEMS-VEHICLE FOR VLSI RESEARCH                   RPI
00049  83-07-042 VLSI RELIABILITY RESEARCH PROGRAM                                 CLEMSON
00050  83-12-043 MICROSCALE STUDIES OF THE ELECTRIC PROPERTIES OF OXYGEN-INDUCED   MIT
00051  84-01-044 UCSB GaAs DIGITAL RESEARCH CORE PROGRAM                           UC/SANTA BARBARA
00052  84-01-045 AUTOMATION IN SEMICONDUCTOR MANUFACTURING                         MICHIGAN
00053  84-01-046 MANUFACTURING SCIENCE & TECHNOLOGY FOR VLSI                       STANFORD
00054  84-02-047 CENTER FOR GaAs DIGITAL DEVICE RESEARCH                           STANFORD
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UNIVERSITY	CONTRACT NUMBER	1ST YEAR FUNDS
COLUMBIA	83-01-002	88755
IOWA	83-01-003	112031
NOTRE DAME	83-01-008	91078
UCLA	83-01-021	90600
BROWN	83-01-032	99000
MIT	83-01-033	747533
JOHNS HOPKINS	83-01-034	98809
WISCONSIN	83-01-027	88000
ARIZONA	83-01-012	104016
UNC	82-11-003	80475
GEORGIA TECH	83-01-004	99974
MCNC	83-01-005	84535
STANFORD	83-01-006	115836
STANFORD	83-01-009	101326
UNC	83-01-025	139917
PENN STATE	83-01-026	92464
MINNESOTA	83-01-024	96412
ILLINOIS	83-01-030	130145
STANFORD	83-01-031	110567
ARIZONA	83-01-038	65362
CLEMSON	83-07-042	215424
S. CAROLINA	83-01-023	96500
FLORIDA	83-01-037	71864
UC SANTA BAR.	84-01-044	1450000
MICHIGAN	84-01-045	337155
STANFORD	84-01-046	900749
STANFORD	84-02-047	150000

CONTRACTS TO RENEW

UNIVERSITY	CONTRACT NUMBER	1ST YEAR FUNDS
CMU	82-11-007	750000
CORNELL	82-11-001	998000
MISS. ST.	82-11-005	116239
BERKELEY	82-11-008	1000006
STANFORD	82-11-002	109997
MCNC	83-01-040	551293
PENN STATE	83-01-010	103240
TEXAS A & M	83-01-017	100992
YALE	83-01-018	97040
ARIZONA STATE	83-01-020	101000
MINNESOTA	82-11-004	73000
ILLINOIS	82-11-006	99973
ILLINOIS	83-01-014	129844
MINNESOTA	83-01-015	116000
VERMONT	83-01-016	78974
CMU	83-01-022	32150
ROCHESTER	83-01-028	105000
USC	83-01-029	116628
ILLINOIS	83-01-035	101791
YALE	83-01-036	100399
CORNELL	83-01-039	96624
RPI	83-01-041	958000
ARIZONA	83-01-007	80260
CMU	83-01-011	95000
ILLINOIS	83-01-013	92553
PURDUE	83-01-001	91680

STATEMENT OF STEPHEN KAHNE, DEAN OF ENGINEERING, POLYTECHNIC INSTITUTE OF NEW YORK, BROOKLYN, NY, ON BEHALF OF THE AMERICAN SOCIETY OF ENGINEERING EDUCATION, WASHINGTON, DC

Mr. KAHNE. I am Stephen Kahne, Dean of Engineering at the Polytechnic Institute of New York. I am honored to have the opportunity to present some testimony on my behalf on behalf of my institution and on behalf of the American Society for Engineering Education, at this hearing on 2165.

Polytechnic has one of the largest graduate engineering programs in the country, and it is a private institution with about 70 percent of its income derived from tuition—a very high percentage by national standards.

The R&D credit that passed in 1981 encouraged companies to increase their expenditures in R&D generally. And I am pleased to say that many companies increased their support of research institutions. At the Polytechnic, for example, industrial support for research has increased from 4 percent of our total in 1980 to nearly 30 percent today. The incremental tax credit passed in 1981 was designed to encourage companies to increase their levels of R&D each year. University research, however, does not require constantly increasing levels of support. It requires more or less consistent and constant support for extended periods of time. The nonincremental credit for university research in 2165 is talking about not increasing R&D generally by establishing a stable higher level of collaboration between university and industry scientists. And I must emphasize the word stable. The stability of a tax credit is very important, as we plan—and as companies that we are dealing with—plan on the future. Let me mention now the equipment donations part of the bill, in particular. At the Polytechnic, we think that the 1981 legislation has had its intended effects. There has been a noticeable increase in equipment donations since the law passed. Despite the increases in donations, the condition level of instructional and research laboratories in our school—and most others in the United States—is simply terrible. Now, I can cite many cases in which our graduates are unfortunately deficient because they failed to get needed laboratory experience. Therefore, I strongly support the provision in this legislation that will grant an enhanced deduction for used equipment to be used for both research and instruction.

Let me move now to the question of the enhanced deduction for service agreements. I must say that service agreements are critical. What good is equipment if we can't afford to maintain it? I understand that this question of service agreements is controversial at the Treasury and at the IRS because of some precedent that they may be concerned about. I suggest that, instead of granting the enhanced deduction for service agreements, grant the enhanced deduction for equipment that is guaranteed to operate successfully for 5 years. Therefore, we can bill service into the cost of the equipment. I would like to conclude by congratulating the sponsors of this legislation for perceptively using the Tax Code to enhance the university-industry relationship, which in turn will provide for improved industrial products and processes and for better trained scientists and engineers in the United States. Thank you.

Senator CHAFEE. Thank you.

[The prepared statement follows:]

STATEMENT OF STEPHEN KAHNE, DEAN OF ENGINEERING, POLYTECHNIC INSTITUTE OF NEW YORK ON BEHALF OF AMERICAN SOCIETY FOR ENGINEERING EDUCATION

I am Stephen Kahne, Dean of Engineering at the Polytechnic Institute of New York. I am honored to have the opportunity to testify at this hearing. My institution was created in 1973 from the merger of the Polytechnic Institute of Brooklyn and the Engineering College of New York University. We are a large technological university and annually we graduate one of the largest classes in the country of students with masters of engineering degrees. The Institute is a private institution with 70% of its income derived from tuition, a high percentage by national standards.

I am also testifying on behalf of the American Society for Engineering Education, which is composed of 9,500 individual members and 550 institutional members, consisting of accredited schools of engineering and engineering technology and more than one hundred major corporate employers of engineers and engineering technologists.

It is important to note at the outset that high technology companies in New York City and in many other areas of the country do not have the same tradition of working closely with local universities that we find in the Silicon Valley and in the Boston area. Fortunately, there have been indications of change which I will describe in a minute.

S. 2165, Mr. Chairman, offers so many benefits to universities and companies, that it is difficult to do justice to it in three minutes; so, if I limit my comments to the university credit, to service agreements and to used equipment, I hope the Committee will understand that I do not intentionally ignore other important parts of the bill.

It is only a small exaggeration to say that there was a time when institutions of higher education restricted themselves to basic research and companies dealt with applied research "and never the twain would meet." Fortunately for our country, all of that is changing. During the past 15 years, not only have universities proceeded up the research continuum toward applied research, and not only have some companies been doing excellent fundamental research in, for example, microelectronics and biotechnology; but we are also finding excellent examples of university scientists and engineers and company scientists and engineers working together to the benefit of both science and commerce.

The R&D credit that passed in 1981 encouraged companies to increase their expenditures in R&D generally and I am pleased to say that many companies increased their support of research in our institutions. At my own institute, for example, industrial support for research has increased from 4% of the total in 1980 to nearly 30% today.

I do not attribute the increase solely to the 1981 law; we had noticed signs of increased activity before the R&D credit passed. I should note also that the credit gave us an incentive to market our research more aggressively. But there seems to be no question that the companies which we approached were motivated by the credit to increase their R&D and to seek research assistance from area universities.

Nevertheless, the incremental tax credit that passed in 1981 was designed to encourage companies to increase their levels of R&D each year. University research, however, does not require constantly increasing levels of support. It requires more or less constant support for extended periods of time. The non-incremental credit for university research in S. 2165 is targeted not to increase R&D generally, but to establish a higher level of collaboration between university and industry scientists with results that will benefit our country's commerce and trade.

I turn now to the equipment donations part of the bill. At the Polytechnic, we think that the 1981 legislation has had its intended effect. We don't know the motives of companies that donate research equipment to the institute, but there has been a noticeable increase in donations since the law passed.

Despite the increase in donations, the condition of laboratories in our school and in most others in the United States is terrible. I can cite many cases in which our graduates are unfortunately deficient because they failed to get needed laboratory experience. Therefore, I strongly support the provision in this legislation that will grant an enhanced deduction for used equipment.

A 1979 survey sponsored by the National Science Foundation found that the average age of equipment in university laboratories was 7-years while the average age industrial research equipment was three and a half years. It is my perception that the differential has increased since 1979. Surely we would prefer new equipment, but when you have ten and twenty year old instruments, three year old donations are "like new."

Let me move now to the question of the enhanced deduction for service agreements. I must say that service agreements are critical. What good is equipment if we cannot afford to maintain it.

I understand, however, that the question of service agreements is controversial at the Treasury Department and the IRS because of the precedent that may have charities clamoring for tax recognition of voluntary effort. I suggest that, instead of granting the enhanced deduction for service agreements, grant the enhanced deduction for equipment guaranteed to operate successfully for five years. To avoid the precedent, build service into the cost of the equipment.

Let me conclude by congratulating the sponsors of this legislation for perceptively using the tax code to enhance the university-industry relationship which in turn will provide for improved industrial products and processes and for better trained scientists and engineers. The American people generously spend many billions of dollars each year to support basic research in our universities. With this legislation, you will assure them that the practical findings of university research will reach market places in this country and elsewhere.

Senator CHAFEE. Mr. Bloustein, in your comments, you dealt with the service contracts, too.

Mr. BLOUSTEIN. Yes, I did, sir.

Senator CHAFEE. And you heard—I can't recall whether Mr. Chapoton from Treasury dealt with that.

Mr. BLOUSTEIN. He did.

Senator CHAFEE. And in his testimony, he expressed the concern that Mr. Kahne noted in his statement. How can we figure what it costs to maintain this equipment?

Mr. BLOUSTEIN. Senator Chafee, I don't know the technical pitfalls that the representative from Treasury is concerned about, but I would suppose that there are ways to tie the service directly to the instrument. Stephen Kahne suggested one of them, but I would think that there are other ways as well. The point I want to reiterate is that a lot of the instrumentation our scientists use is of one-of-a-kind equipment, where the service is as necessary to the success of the use of the instrumentation as the instrument itself, and very frequently, the service is as costly. So, we must tie the two together. Providing the benefit for the one may not provide the benefit for the other.

Senator CHAFEE. That is a good point. Thank you. Senator Danforth?

Senator DANFORTH. Dr. Bloustein, I would like to ask this question of you and also to Dean Kahne. Treasury has testified that the R&D credit for university research should be changed only for multiyear grants, while S. 2165 provides a separate credit for all payments to universities for basic research. What is your view?

Mr. BLOUSTEIN. Well, I think the variety that is demonstrated in 2165 is closer to the reality that is affected within our university structures. We have a variety of grants—some of them short term, some of them long term—each equally important, we think, to our future development.

Mr. KAHNE. Multiyear grants are preferable, in general, and if there were some preference given to multiyear grants, I wouldn't have any problem with that. I am just a little concerned that projects that aren't really multiyear by their very nature would then suffer. So, it is a compromise.

Senator DANFORTH. So, you favor the bill as it stands?

Mr. KAHNE. Yes, I do.

Senator DANFORTH. Now, Mr. Bloch, the Semiconductor Research Corporation is a tax-exempt organization of high tech companies. Does it qualify for the R&D credit under current law?

Mr. BLOCH. We think that it qualifies, and we have both talked and submitted a proposal to that effect to IRS. There have been some technical problems that still have to be straightened out, but I am hopeful that in the end it will be the result.

Senator DANFORTH. Gentlemen, thank you very much.

Senator CHAFEE. Let me just ask Dean Kahne about the last sentence in his testimony. "With this legislation, you will assure that the practical findings of university research will reach market places in this country and elsewhere."

We had a good deal of testimony here of concern of that very nature. Mr. Packard from Hewlett-Packard testified here. His testimony dealt with his concern of the research from the Government-funded laboratories getting out to our industries in a greater fashion. But how will this legislation achieve that? I am for it, but I don't see how this legislation will do it.

Mr. KAHNE. Senator, the opportunity for a long-stable relationship between industrial researchers and academic researchers is really the goal here. The opportunity for longer term projects which have known tax implications is what we are discussing. The problem in the past has been that the universities and the industries have not worked as closely together as they could because of the short-term nature of the involvement. There are consultant agreements which are more or less private. There are short-term development projects occasionally at universities funded by industry, but this tax law opens up the possibility of long-term research involvement, so that the research at the universities flows back into the industries, and then into the marketplace.

Senator CHAFEE. Do you envision this thing working out? I personally had thought it more of encouraging the training—as you say, for better trained scientists and engineers. Mr. Packard's testimony was the lack of teachers on the graduate level. They can all go out in computer science, for example—and you have certainly seen this, Doctor, in your university—they can go out and make so much money that you can't keep them on as instructors or associate professors. But I must say, that is what I thought was the objective of this. Do you others agree with the point that Dr. Kahne made at the end?

Mr. BLOUSTEIN. Oh, indeed. If I may, the objective of this bill is more far-reaching than that, and as important as that objective is, I think the total objective of the bill is much more important. Universities and corporations are, to a good degree, going into partnership with American Corporations, Many corporations—the small ones, especially—would like to give up aspects of their own R&D programs and enter into long-term relationships with the universities to make us partners in their underlying R&D. This will especially make that possible if you are talking about permanency. So, what Dean Kahne says, as I see it, is really the most basic service the bill will provide.

Mr. BLOCH. Can I comment on that question from an industry viewpoint? I agree with what is being said completely. Let me make one particular point. I think it is very difficult transferring technology from the university to industry. One way of helping that transfer is by close cooperation—by joint programs between industry and the university—this bill will foster that kind of an environment. The second point I want to make is in regard to your point of faculty leaving to go to industry. That is many times due to the differential in salaries, but other times it is also true that in the university today—in a complex and sophisticated area like semiconductors—the equipment and instruments just do not exist to do proper research, and with the proposed bill, equipment of a sophisticated nature will flow into universities which will help keep people in the university environment.

Senator CHAFEE. I am not quite sure why this encourages a long-term relationship, more than existing law. After all, it is only an incremental—it is what you spend above a baseline, so you have got to keep spending more each year to get the benefit of this legislation. So, it seems to me that you can't go wrong on a routine funding basis for the university project.

Mr. **Bloch**. Let me say two things to that. First of all, I think getting into the habit, so to speak, to deal with universities is very important, and this is what this bill does. And seeing the fruits of it, and then continuing on with your own money probably is more of a forcing function than exists today without this particular bill. Second, many of the companies have high aspirations that they will grow over time. Otherwise, they wouldn't do the research. If a company grows with time, it will allow it to increase its research.

Mr. **Bloustein**. Senator, as I understand it, this bill does also add nonincremental expenditures, and that is one of the reasons it would stabilize——

Senator **Danforth**. Right. This bill, as I understand it, liberalizes that requirement in present law, with respect to R&D spending through universities.

Mr. **Bloustein**. That is one of the more attractive features of it from our point of view.

Senator **Chafee**. OK. Thank you very much. We appreciate your coming.

Doctor, Rutgers used to be a private university, and now you are State supported.

Mr. **Bloustein**. We are not State supported; we are a State university—since 1956. We began as a colonial college, but we are now a State——

Senator **Chafee**. What portion of your support comes from private sources and what part from the State?

Mr. **Bloustein**. Roughly 40 percent—40 to 45 percent—are private sources today.

Senator **Chafee**. And the balance from the State?

Mr. **Bloustein**. Roughly, yes.

Senator **Chafee**. Thank you.

Gentlemen, we appreciate your patience. I assume you have been patient. [Laughter.]

Mr. Moore, Mr. Nolan, and Mr. Howard. Why don't you proceed, Mr. Moore?

STATEMENT OF WAYNE R. MOORE, PRESIDENT AND CHIEF EXECUTIVE OFFICER, MOORE SPECIAL TOOL CO., INC., BRIDGEPORT, CT, ON BEHALF OF NATIONAL MACHINE TOOL BUILDERS ASSOCIATION, WASHINGTON, DC

Mr. **Moore**. Good morning. My name is Wayne Moore. I am President and Chief Executive Officer of Moore Special Tool Co., Inc., located in Bridgeport, CT. I am second vice president of the National Machine Tool Builders' Association, on whose behalf I am appearing today. With me this morning is Kim McCarthy, Legislative Analyst for the Association. Mr. Chairman, we are pleased to appear in support of S. 2165.

As our written submission documents, the relevant economic data clearly point to a depressed industry. And last year, machine tool imports—many of which were technologically advanced and defense sensitive—accounted for a startling 36 percent of domestic consumption, measured by value. The Department of Commerce's decision on NMTBA's petition for import quotas filed under the national security clause of the trade laws is due within the next few weeks. Making the 25 percent R&D tax credit permanent will add a crucial element that is markedly absent from R&D planning which is now underway—the element of certainty. With many machine tool companies literally at the crossroads the certainty of a permanent and substantial R&D tax credit would undoubtedly foster more prudent business planning.

A permanent credit significantly enhances the ability of machine tool builders to make necessary R&D investments in a timely fashion—during a period in which, competitively speaking, timing is everything. We urge the Congress to act on this issue now—for many companies, a delay of even 1 year will have significant consequences.

We commend title I's extension of the R&D tax credit to start up corporations and research joint ventures comprised of corporations from different lines of businesses, which would make it available to machine tool builders involved in joint ventures with manufacturers of computers, robotics, and other advanced materials handling systems. Joint ventures of this type will undoubtedly become more frequent as technology progresses, especially in the area of flexible manufacturing systems. For reasons enumerated in our written statement, we urge that R&D limited partnerships be made eligible for the credit. A recent survey of our membership indicates that a majority believes that today's engineering graduates are not adequately prepared for machine tool R&D work. Title II's enhanced deduction for state-of-the-art scientific equipment donations will help address this problem The bill defines "state-of-the-art" as equipment which is not more than 3 years old. We respectfully suggest that a cutoff of 3 years is not necessarily an accurate reflection of how quickly technology actually moves in all industries. Perhaps the better measuring stick in this regard is that of accelerated depreciation schedules—in the case of machine tools, 5 years.

I see that my time is almost up. Before closing I want to emphasize that for our industry, passage of S. 2165 should not in any way be viewed as a substitute for the trade relief which we have requested. The R&D tax credit, by its nature, assumes a machine tool industry that is, at the very least, on the way out of its current widespread decline. But as our written submission indicates, if the present seemingly unstoppable tide of machine tool imports is not temporarily restricted, the preponderance of U.S. capability for the production of machine tools will very soon be transferred offshore. Thank you. I would be happy to respond to your questions. Thank you very much.

Senator CHAFEE. Well, Mr. Moore, I am very familiar with the problems of the machine tool industry, coming from the State that I do, and the background and so forth. And I am very sympathetic to what your company and your industry has undergone, and I note that in the footnote on page 5 you talk about the feasibility of smaller companies using this tax credit. Could you just mention a couple of words on that subject?

Mr. MOORE. In some cases, the bookkeeping is difficult in the R&D definition, but we would like, if we could, to work with the committee on this particular aspect of our ability to use it.

Senator CHAFEE. We would like to.

Mr. MOORE. If it is made available to us, we could use it.

Senator CHAFEE. Now, who is going to talk with them on that? Mr. Connelly, who is on Senator Danforth's staff, would you follow up because this is very important? We don't want to exclude some of the smaller companies who are some of the people who want to help on this. This isn't just designed for IBM's, although I notice in the testimony of Mr. Chapoton—I don't know if you were here for the earlier part of the hearing—but today very few companies have the lion's share of the tax credit benefits, but that probably comes about because they are putting the lion's share of R&D out.

Mr. MOORE. Maybe part of the problem is the Assistant Secretary's definition of what R&D might be. If it is made too complicated and burdensome to differentiate between what is true R&D and what is truly not R&D, the complication makes it difficult for bookkeeping reasons to keep track of both of them. So, we would urge, if possible, not to go too far with the bill so that modification really obscures the real benefit of it and makes it unavailable to those who have a difficult time as it is to differentiate between when it is functional and when it is R&D.

Senator DANFORTH. You have made, I think, a very strong point. That is, if we start tightening up the definition too much and creating too much uncertainty, small business will have even a greater problem——

Mr. MOORE. That is right.

Senator DANFORTH. In attempting to guess whether a particular expenditure will be allowed or disallowed, and also you will have greater vulnerability to a change in those rules.

Mr. MOORE. Correct. A more obscure definition will definitely affect the smaller business that may not have the resources and accounting to meet the requirements of the bill to benefit from it. We are in favor of a definition which is clear and simple.

Senator DANFORTH. We have worked with Treasury on this matter of definition, and we have worked hard and long on the subject. We feel that the bill in its present form does correct the potential for abuse and does more carefully target research and development when it is true research and not cover how to build a better hamburger or ridiculous things like that. So, we really feel that we have done a good job with the bill.

Mr. MOORE. We do feel that the bill is on target, and now it appears that it may be tampered with to the extent that it will not be effective.

Senator DANFORTH. You have been very helpful in your testimony on that point, and with respect to the particular concerns of small business, I do hope that you will get——

Mr. MOORE. Well, we thank you for your efforts. We are also a very small company, and we are in the R&D high technology race like other companies are, even though we are small, and we must be.

Senator DANFORTH. Thank you.

Senator CHAFEE. I would recommend to anybody that they look at your testimony—on the back pages here. It reads like—rather gloomily "* * * employment in the domestic industry has plummeted from 110,200 workers to 64,600" in 4 years. This is an average job loss of over 1,100 persons per month.

Mr. MOORE. Yes, sir.

Senator CHAFEE. Your incoming orders—your whole picture—how is your business doing?

Mr. MOORE. Well, I would say in the machine tool business in general, employment is down about 50 percent from about 3 years ago.

Senator CHAFEE. And what are you doing? How are you doing?

Mr. MOORE. We are struggling. We are up against the type of position that this R&D bill attempts to aid. We are suffering from a loss of orders, and at the same time, we know that the future of our company is tied to higher R&D in machine tools, in electronics, and in computers. It demands a high investment when funds are not there. And so, even marginal things like this R&D—I wouldn't say marginal, but it is part of the process of planning that is vitally needed, along with other things to make possible going into R&D when you are already faced with other things and very severe conditions. We welcome it, and we are up against a hard point because of the loss of funds—and yet the necessity of going to R&D to a higher extent.

Senator CHAFEE. As you know, one of the great machine tool companies is in any State, and a person told me that Brown & Sharp for the first time since 1896 has fewer than 1,000 employees.

Mr. MOORE. Yes. Most of the machine tool industry is down by 50 percent. They have lost about half of their people in about 3 years, and their sales are off about 50 percent from 3 years ago. And if you want to try to adjust in the company, in 3 years to adjust to that is just agony.

Senator CHAFEE. I see on the bottom of page 4 of your written testimony earlier this month, plans were announced to subsidize certain R&D activities. What they had zeroed in on earlier, they are going to get.

Mr. MOORE. That is correct.

Senator CHAFEE. One of the areas is ceramics, which is the area Mr. Wellington testified on. Is he still here?

[No response.]

Mr. MOORE. I think it is important for the country to see what its competitors are doing just as we, as a machine tool company, must see what our competitors are doing. Others are taking this direction as nations because they recognize the importance of R&D. In an overwhelming way, capturing the world market will be based on technology. This country must also look at what the Japanese and other countries are doing in R&D and begin to match it.

Senator CHAFEE. Thank you very much, Mr. Moore.

Mr. Nolan.

[The prepared statement follows:]

STATEMENT BY
WAYNE R. MOORE
PRESIDENT
MOORE SPECIAL TOOL CO., INC.
REPRESENTING THE
NATIONAL MACHINE TOOL BUILDERS' ASSOCIATION
BEFORE THE
SUBCOMMITTEE ON TAXATION AND DEBT MANAGEMENT
COMMITTEE ON FINANCE
UNITED STATES SENATE
FEBRUARY 24, 1984

I. INTRODUCTION

Good morning, my name is Wayne Moore. I am President and Chief Executive Officer of Moore Special Tool Company, Inc. Located in Bridgeport, Connecticut, the company is privately-owned and manufactures the tools of metalworking precision: jig grinders, jig borers, angle dividing equipment and universal measuring machines used by Bureaus of Standards throughout the world. We currently employ 470 persons.

I am 2nd Vice Chairman of the National Machine Tool Builders' Association, on whose behalf I am appearing today. NMTBA is a trade association comprised of more than 300 member companies which account for approximately 85 percent of domestic machine tool production. With me this morning is Kim McCarthy, Legislative Analyst for the Association.

Mr. Chairman, we appreciate this opportunity to discuss S. 2165, the High Technology Research and Scientific Education Act. We believe that this legislation sends a strong signal to American industry and educational institutions -- a signal which clearly indicates that America's position of technological leadership in the world is a compelling national priority. In our view, this is precisely the right signal to be sending and we are pleased to offer our support of this timely and important initiative.

Before proceeding with our comments concerning specific provisions of the bill, I would like to give the Subcommittee a very brief overview of the U.S. machine tool industry and where it is today. Machine tools are power-driven machines, not hand held, that are used to cut, form or shape metal. They are, in short, the fundamental elements of industrial and military production. The industry is currently experiencing unprecedented strains -- the relevant economic data in shipments, orders, employment, profits, capital formation and capacity utilization clearly point to a depressed industry. (See Appendix I for an update of the economic status of the machine tool industry.) We believe that these strains cannot safely be assumed to be solely a result of fluctuations in the business cycle. In this regard, the phenomenal influx of imported machine tools has played a significant role in the domestic industry's decline. Last year machine tool imports -- many of which were technologically advanced and defense-sensitive -- accounted for a startling 36 percent of domestic consumption, measured by value. This import share for 1983 represents an increase of more than 30 percent over 1982 levels. NMTBA has filed a petition under the national security provision of the U.S. trade laws, seeking trade relief in the form of temporary quotas upon imports of metal-cutting and metal-forming machine tools.[1] The Department of Commerce's decision on the petition is due within the next few weeks.

II. R&D INITIATIVES ARE ESSENTIAL IF THE INDUSTRY IS TO RECAPTURE ITS COMPETITIVE EDGE AND REMAIN A VIABLE FORCE IN WORLD MARKETS

The industry is struggling to maintain its competitive edge, both at home and abroad. And like many other industries, the U.S. machine tool industry has been substantially affected by rapid advances in technology and in manufacturing processes -- particularly with regard to computer assisted design and manufacturing. Thus, expenditures for research and development are the lifeblood of the machine tool business -- in order to compete effectively in domestic and export markets, the industry must retain the ability to continue and increase its R&D expenditures.

Figure 1, which shows the industry's aggregate expenditures for R&D as a percent of total sales in the years 1972 through 1982, indicates that the industry held fairly steady in its R&D expenditures during that period. In fact 1982, the latest year for which complete data are available, shows a rise of just over one percentage point -- an increase in excess of 22 percent over the previous year. This reflects the industry's commitment to a strong R&D program.

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[1] Last October, NMTBA, represented by James A. Currie, Sr., President, Erie Press Systems, appeared before this Committee to discuss the state of the U.S. machine tool industry. His testimony included a detailed account of the industry and its petition for trade relief filed under Section 232 of the Trade Expansion Act of 1962. See, generally, U.S. Congress, Senate Committee on Finance, Subcommittee on Economic Growth, Employment and Revenue Sharing, Statement of James A. Currie, Sr., October 3, 1983 (98th Cong., 1st Sess.).

However, in the circumstances now facing the industry -- particularly when taking into account last year's precipitous drop in shipments -- it is far from clear that this trend will continue. The result will be a vicious circle in which declines in sales and profits will retard technological advances, causing further declines in sales and profits, with the cycle continuing until the industry has fallen irretrievably behind foreign competitors. The risk that the domestic machine tool industry may thus be eclipsed by its foreign competition -- as other once-strong United States industries already have been -- has obvious importance for the national security, an implication noted by Senator Danforth when he introduced S. 2165 last year.

The threat that imports pose to the domestic industry is especially ominous because the substantial competitive advantages that imports enjoy are attributable in large part to direct government subsidization or the effects of governmental coordination of machine tool producers. Earlier this month, for example, MITI and Japan's Small Business Agency announced plans to create four subsidizing and financing systems centered around R&D activity; MITI is planning to finance half the costs incurred by businesses engaged in R&D projects in new ceramics, electro-mechanical products and other high-tech fields.[2]

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[2] Japan Economic Journal, February 14, 1984, at 1. It has been amply documented that direct subsidies to joint industry-government R&D projects are a widely used form of government support in Japan. For an excellent synopsis of R&D subsidies currently available to Japanese machine tool builders, see, "Computer-Aided Manufacturing: the Japanese Challenge," Comments Submitted to the United States International Trade Commission, Investigation No. 332-149, by Cravath, Swain & Moore (attorneys for Cincinnati Milacron), December 14, 1982.

III. THE HIGH TECHNOLOGY RESEARCH AND SCIENTIFIC EDUCATION ACT

NMTBA strongly supports Title I of the bill which, in addition to improving the 25 percent R&D tax credit, eliminates the current sunset provision under which the credit is due to expire at the end of 1985, thereby making the credit permanent and adding a crucial element markedly absent from R&D planning which is now underway -- the element of certainty. With many machine tool companies literally at the crossroads, the certainty of a permanent and substantial R&D tax credit would undoubtedly foster more prudent business planning. Certainly we are aware that competitive pressures which the industry faces -- and the attendant need to invest in R&D -- will continue, whether or not the R&D tax credit is made permanent. However, a permanent credit significantly enhances the ability of machine tool builders to make necessary R&D investments in a timely fashion -- during a period in which, competitively speaking, timing is everything. The sooner that certainty can be established, the sooner machine tool builders and others will be able to factor the availability of the credit into both long and short-range planning.[3] Thus, we urge the Congress to acton this issue now --

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[3] Recent contacts with NMTBA members indicate that many of those companies operating in a profit mode have made use of the credit since its enactment in 1981. It should be noted, however, that a substantial portion of our membership is and has been operating at a loss and therefore has not been in a position to claim the credit. These companies have indicated their intention to utilize the credit if and when their operations resume at profitable levels. My own company has made somewhat limited use of the credit, primarily because of the bookkeeping requirements, which can be rather burdensome to smaller companies. I would welcome the opportunity to work with the Subcommittee in devising a less onerous accounting procedure.

for many companies a delay in action of even one year will have significant consequences.

In addition, we commend Title I's extension of the R&D tax credit to start-up corporations and research joint ventures comprised of corporations from different lines of businesses. Currently, the credit applies only to those corporate joint ventures which might be termed "intra-industry." Title I's extension of the credit would, for example, make it available to machine tool builders involved in joint ventures with manufacturers of computers, robotics and other advanced materials handling systems. Joint ventures of this type will undoubtedly become more frequent as technology progresses -- especially in the rapidly growing area of flexible manufacturing systems. Extending the credit in this fashion will benefit the industry and contribute significantly toward the achievement of the bill's primary objective -- the enhancement of U.S. technological competitiveness.

We understand however, that this extension was not intended to include R&D Limited Partnerships -- a model for joint venture R&D which promotes off balance-sheet, interest-free venture capital funding. While we recognize that the tax incentives already associated with the RDLP model influenced this decision, we urge the Subcommittee to re-visit this assessment. Currently, there are a variety of tax shelters (including the RDLP) available to individual investors -- these tax shelters are, in effect, competing against one another for investors' dollars. The RDLP is unique in that it is geared specifically toward the promotion of research and product development -- as such, it has the potential to generate revenue, thereby increasing the tax base. Extending the R&D tax credit to include RDLPs would presumably make the RDLP a more attractive vehicle for investment. In other words, if these investment dollars are going to be spent in some form of tax shelter, why not encourage an investment that is both R&D related and which has the potential for creating new wealth?

Title I also revises the definition of qualified reserch for R&D credit purposes. We understand that in order to ensure that the credit fulfills the purpose for which it was enacted, the definition has been narrowed so as to eliminate all improvements in which cosmetic changes dominate functional changes. Certainly we appreciate the rationale which underlies this clarification. Our assumption is that functional product improvements derived from R&D which may also result in a cosmetic change would be an allowable expenditure under the revised definition, as long as the functional improvement is predominant. This assumption appears to be consistent with the drafters' intent and should be clarified in report language which accompanies the legislation.

We commend Title I's use of the term "business item" to describe the category of development objectives to which qualifying R&D may be directed for credit purposes. NMTBA believes the use of this term, defined to include "processes" as well as "products," is particularly appropriate in an R&D context, where the improvement of manufacturing methods is influenced as much by "processes" as by the end-products themselves. The inclusion of computer software in this definition is especially relevant to machine tool industry R&D efforts, which are increasingly focused on automation and the evolution of numerically-controlled machinery.

NMTBA also supports Title II of S. 2165, geared toward the promotion of university and scientific research. Specifically, the machine tool industry will benefit from Title II's creation of a credit equal to 25 percent of that portion of a corporation's payments to universities and other eligible institutions for basic research which exceeds a fixed, historical maintenance-of-effort floor. We believe this credit will promote greater collaboration by NMTBA member companies with universities on basic research projects. This is especially true in light of the fact that Title II adds to the category of qualified organizations to whom corporate payments for basic research are eligible for the credit an organization that is tax-exempt; organized and operated primarily to promote university scientific research; and expends on a current basis substantially all of its funds through grants and contracts for such basic research. This addition is significant because presumably, it would extend the credit to basic research payments made to organizations such as the recently formed Institute of Advanced Manufacturing Sciences in Cincinnati, Ohio. The Institute is a non-profit, tax-exempt organization designed as a joint enterprise incorporating industry, local and state government and the University of Cincinnati to foster the identification and adaptation of new technology.

A recent survey of our membership indicates that a majority believes that today's engineering graduates are not adequately prepared for machine tool R&D work. Title II's enhanced deduction for state-of-the-art scientific equipment donations (including computer software) will help address this problem. The bill defines "state-of-the-art" as equipment which is not more than 3 years old. We respectfully suggest that a cut-off of 3 years is not necessarily an accurate reflection of how quickly technology actually moves in all industries. In this regard, perhaps the better "measuring stick" is that of accelerated depreciation schedules -- in the case of machine tools, five years. Machine tool builders and their customers would thus be encouraged not only to donate scientific equipment to a qualifying educational institution, but also to apply the savings resulting from that deduction toward the purchase of new equipment for their plants. This arrangement would be mutually beneficial to both the taxpayer and the recipient institution and could spur an enormously productive capital investment cycle.

Title II also expands the eligible uses of the donated equipment to include direct scientific education as well as research and "research training." Because Title II's definition of eligible recipients includes universities, colleges, junior colleges and vocational schools, we urge that the Committee Report make clear that the broadest possible scope of vocational training be included as an eligible use as well. The inclusion of vocational training as an eligible use of donated equipment is entirely consistent with the objectives of S. 2165. As Senator Grassley has recognized, the nation's increasing reliance on technological innovation for productivity gains fosters a growing need for highly skilled workers.

IV. CONCLUSION

Enactment of this legislation will unquestionably result in a short-term loss of revenue to the Treasury. But just as the U.S. machine tool industry views research and development expenditures as an investment in its future, we are hopeful that this Committee will view S. 2165 as an investment in America's future. We believe it is a question of priorities -- a modest short-term loss in exchange for a potentially robust long-term gain, which will manifest itself in terms of increased employment, enchanced productivity and competitiveness, a reduction in the trade deficit, and ultimately, an expanded tax base.

It should be emphasized, however, that for the machine tool industry, passage of S. 2165 should not in any way be viewed as a substitute for the trade relief which we have requested under Section 232 of the Trade Expansion Act of 1962. The R&D tax credit, by its nature, assumes an industry that is, at the very least, on the way out of its current widespread decline. But it is clear that if the present seemingly unstoppable tide of machine tool imports is not temporarily restricted, the preponderance of U.S. capability for the production of machine tools will very soon be transferred offshore.

Thank you.

Appendix I

MACHINE TOOL INDUSTRY ECONOMIC STATUS UPDATE

Because a number of news stories have reported increased orders for machine tools in recent months, some have interpreted these reports as an indication that the machine tool industry has begun a significant recovery and that its economic woes will soon be over.

Unfortunately, this is clearly not the case. While orders have increased moderately from last year's levels, those 1982 levels were so extraordinarily low that even a modest increase looks big on a percentage basis. When expressed in real, inflation-adjusted dollars, however, the industry's economic position today can be shown to be more precarious than it was a year ago.

More importantly, even as the total machine tool market has declined over the past three years, the market share of imported machine tools continues to skyrocket. Hence, even with the current modest increase in machine tool orders, an increasingly large percentage is going to foreign manufacturers.

If anything, the most recently available data support even more strongly the industry's contention that a curb on imports is urgently needed to assure the continued viability of a domestic machine tool industry capable of meeting our national security needs.

* When the industry's section 232 petition was filed in March 1983, its net new orders were at their lowest level in over a decade in nominal dollars. Far more important, however, in real, ~~inflation-ad~~justed dollars, orders had fallen to their lowest levels since the recession of the late 1940's.

* It is from this 35 year low point that a small increase has taken place.

* Using 1972 constant dollars, the value of net new machine tool orders for the first three quarters of 1983 (latest data) are as follows: $99.5 million; $124.9 million; and $146.6 million, for a total of $371.0 million. Real orders for the same period in 1982 stood at $376.2 million, leaving 1983 $5.2 million behind the 1982 totals. While quarterly order levels have strengthened throughout 1983, the industry is clearly far from substantial recovery.

* In contrast to the "improved" quarterly averages of 1983, consider the levels of quarterly average real orders in the past few years:

1978	$554.1 million
1979	623.6 million
1980	450.8 million
1981	253.2 million
1982	120.3 million
1983	123.7 million (first three quarters)

* Even at the depth of the previous machine tool order recession in 1975, quarterly average orders were almost $215 million, with the worst quarter during that decline being $163.9 million. In other words, to date, the very best quarter of 1983 was still below the very worst quarter of the industry's previous recession! This can hardly be classified as an industry recovery.

* Even worse, since the cash flow of the industry is tied to shipments--not orders--the revenues from even the modest 1983 increases in orders will not reach machine tool companies for some time. In fact, shipments in the latest reported quarter (third quarter 1983) stand at the lowest level in real dollars since the end of World War II.

* In contrast to the previous year, shipments for the first three quarters of 1983 declined 57.4 percent. The 1982 level, again in real inflation-adjusted dollars, was $972.4 million. The 1983 level is $414.1 million. Since the builders do not receive their money until the machine is shipped, the actual amount of cash coming into the industry today is at an all time low.

* Although the industry has been able to rehire a few employees in 1983, we have hardly been able to make a dent. From April of 1980 to July of 1983, employment in the domestic industry plummetted from 110,200 workers to 64,600. This is an average job loss rate of over 1100 persons per month for 40 months. By October of 1983, the industry had rehired only 1400 of these laid-off workers. While orders have shown signs of improvement throughout 1983, in the course of the three quarters following the industry's employment trough we were only able to rehire 3 percent of the work force that had been laid off during the industry's long downturn.

* Meanwhile, exports by U.S. machine tool makers have declined at a shocking rate. In 1981 exports were just over $1 billion. In 1982, they dropped to $615 million. In 1983, we estimate the final total will be less than $400 million. Given the dire economic status of the U.S. industry's most important

export markets--Canada, Mexico, and Western Europe--there is little reason to believe that U.S. builders can look to overseas markets for help in recovering.

* Not surprisingly, during the recent recession even imports of machine tools have declined in actual dollars--from about $1.5 billion in 1981, to $1.25 billion in 1982, to a projected $1.0 billion in 1983. Is this good news? Not at all. For the fact is that this 33 percent decline in imports is quite modest compared to the 66 percent drop in domestic shipments during the same time period. During the recession domestic shipments declined by twice as much as imports!

* In fact, for a major factor in the consideration of the section 232 petition--the market share of imports--1983 has been the most disastrous year on record. Machine tool imports have taken a dramatic jump in terms of market share in 1983. For the previous three years, the import market share stood at 23.3 percent, 24.9 percent, and 26.8 percent, respectively. But this past year, the gradual pace of market share gain by imports was interrupted. As a result of the plummeting shipment level by the domestic industry, imports are estimated to have risen to a record 36.2 percent of the market--and, to the best of our knowledge, are still rising.

* This dramatic and continuing rise in import market share underscores the fact that the threat of import to the domestic industry's viability has increased, not decreased, over the course of the past year.

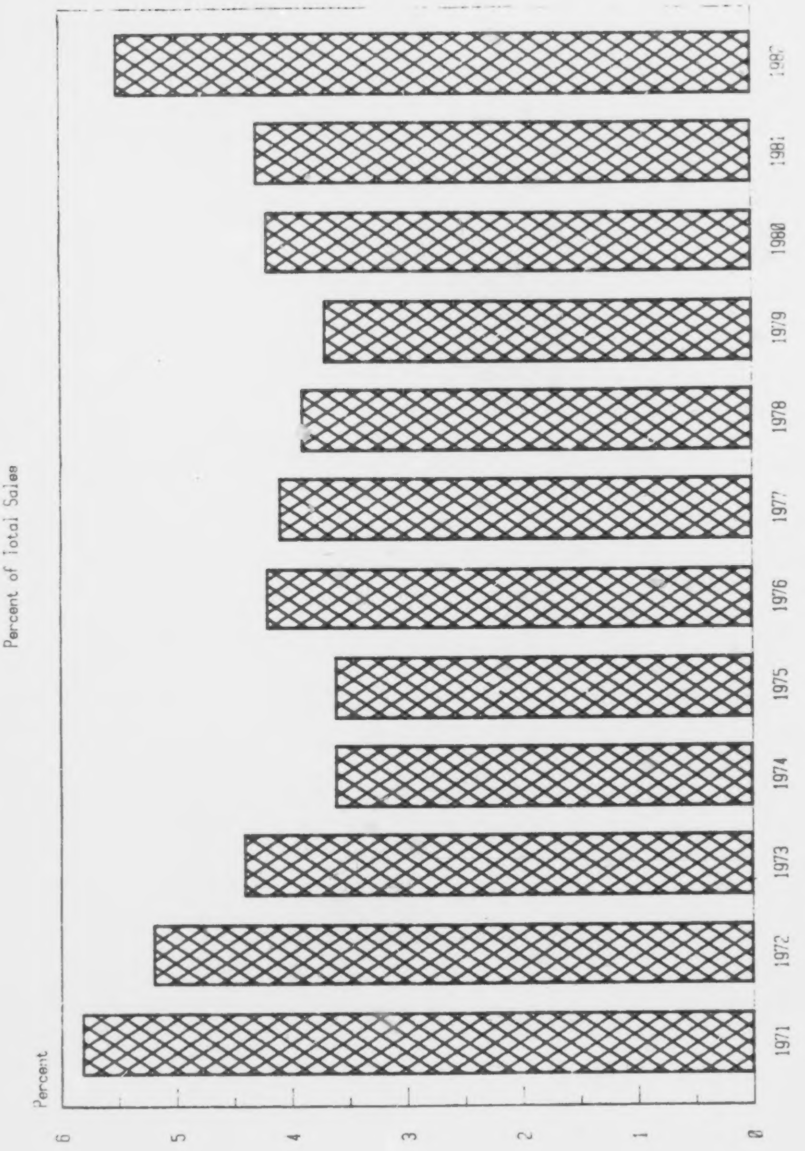
* * *

These facts, taken as a whole, lead inevitably to the conclusion that the machine tool industry has remained untouched by the general economic recovery of 1983.

Though nominal dollar orders have made some gains late in the year, in real terms these gains are paltry indeed. Shipments have exhibited no gains; instead plummetting to record lows. Employment in the industry has dropped to the lowest levels experienced in the past thirty-five years. All the while, the flood of imported machine tools has barely slowed. As a result, the hemorrhaging of the nation's domestic machine tool building capacity continues unabated and America's ability to produce the machine tools vital to our defense industries is being further eroded.

Figure 1

Machine Tool Investment in R&D



Source: NMTBA

STATEMENT OF JOHN S. NOLAN, ESQ., MILLER & CHEVALIER, WASHINGTON, DC, ON BEHALF OF THE MOTOR VEHICLE MANUFACTURERS ASSOCIATION, WASHINGTON, DC

Mr. NOLAN. I am John S. Nolan of Miller & Chevalier, Chartered, Washington, DC. I appear for the Motor Vehicle Manufacturers Association, representing the principal U.S. manufacturers of automobiles, trucks, and buses.

The domestic automotive industry is currently engaged in massive research and development to improve the functional, safety, environmental, fuel efficiency, and other characteristics of automotive products. We are spending $4.4 billion annually on research and development, constituting about 16 percent of all non-Government research and development in the United States.

This research is absolutely essential to incorporate new technological developments into automotive products to achieve safety, environmental fuel efficiency, and other such improvements to remain competitive with foreign automotive producers whose research is subsidized by their governments, and to meet increasingly stringent performance standards required by Government regulation. This domestic automotive research involves substantial risk and is precisely the kind of activity that the research and experimental tax credit is designed to sponsor.

We feel that while S. 2165 makes significant progress toward clarifying the scope of "qualified research" for purposes of the tax credit, some modest additions to the proposed statutory language are necessary. Our changes would insure that the credit applies if the principal purpose of the research is to improve the function, safety, performance, reliability, quality, or cost of the product or the production process as opposed to style, taste, cosmetic, or seasonal design considerations. We would also incorporate a safe harbor rule that research or experimentation to comply with Government regulation as to environmental, energy efficiency, safety, noise, or similar standards would qualify for the credit. If these and other minor changes we suggest (which are specifically described in my written statement), are made, we fully support enactment of S. 2165.

Mr. Chairman, the Treasury position that the credit should be confined to truly innovative, highly risky research, and should not extend to development activities, is not realistic. It is impossible in a tax statute to draw these kinds of distinctions. The IRS cannot administer the kind of subjective, uncertain, case-by-case "factor" approaches that are suggested by the Treasury. The result will be that the credit will be denied on audit in virtually every case. Litigation will result, and there will be no certainty as to the availability of the credit, and its benefits will be lost.

Furthermore, this approach is self-defeating. It is as important as a practical matter to apply the fruits of research to consumer products as it is to conduct the research in the first place. The line should be drawn as drawn in S. 2165 as we suggest at activities designed to improve the functional characteristics of products, not at some vague and subjective test of riskiness. Applied research and development can be just as risky and just as important as basic research. Both are equally necessary to keep America moving forward.

Mr. Chairman, the modest changes to S. 2165 that we have suggested will ensure that we each receive the support that the bill intends on an evenhanded basis. Thank you very much.

Senator Chafee. Thank you, Mr. Nolan. Mr. Howard.

[The prepared statement follows:]

STATEMENT OF JOHN S. NOLAN ON BEHALF OF MOTOR VEHICLE MANUFACTURERS ASSOCIATION REGARDING THE DEFINITION OF QUALIFIED RESEARCH IN S. 2165 SUBCOMMITTEE ON TAXATION AND DEBT MANAGEMENT UNITED STATES SENATE COMMITTEE ON FINANCE

I am John S. Nolan of Miller & Chevalier, Chartered, Washington, D.C. I appear on behalf of the Motor Vehicle Manufacturers Association of the United States, Inc. (MVMA), a trade association comprising the principal manufacturers of domestic automobiles, trucks, and buses.[1] The MVMA represents its members in matters that affect the interests and welfare of the motor vehicle manufacturing industry (hereinafter automotive industry). For the reasons discussed below, the tax treatment of research and development expenses is important to the automotive industry, which currently accounts for approximately 16 percent of non-government industrial research and development expenditures in the United States.

The MVMA agrees that the provision (section 102) in S. 2165 which defines "qualified research," with respect to amounts eligible for treatment as tax credits under section 44F, would be an improvement over the existing statutory language, assuming that a few changes to the Bill necessary to prevent harmful discrimination against the automotive industry are made. If such changes are made, MVMA would support the provision (section 101) in S. 2165 which makes permanent the tax credit for qualified research expenses provided in section 44F, Internal Revenue Code of 1954.

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[1] The member companies of MVMA are: American Motors Corporation; Chrysler Corporation; Ford Motor Company; General Motors Corporation; International Harvester Company; M.A.N. Truck & Bus Corporation; PACCAR Inc.; Volkswagen of America, Inc.; Volvo North America Corporation.

It is entirely consistent with the purpose of S. 2165 -- to enhance United States industries' productivity and international competitive position -- that the Bill clearly show that the incentive of the credit also exists for the automotive industry. To increase productivity and compete with its foreign rivals, the automotive industry must constantly seek to improve its products and its manufacturing processes. This requires continuous research and experimentation. The tests contained in the Bill should be revised to ensure that such research and experimentation qualifies for the credit.

Description of Research and Development in the Automotive Industry

The Automotive Industry's Role in the Economy

The automotive industry has traditionally played a vital role in the nation's economy. Output of cars and trucks in the United States represented 3.8 percent of the Gross National Product in 1983, down from a recent high of 5.1 percent in 1977. In 1982, automotive manufacturers alone operated 309 production facilities in 35 states, employing 750,000 people at an average total hourly compensation of $19.37.

The United States Bureau of the Census data for 1980, the most recent data available, show that the motor vehicle and equipment industry employed more than 778,000 people and had an annual payroll of $16 billion. An estimated additional 775,000 people were employed in other industries to manufacture automotive parts. The total automotive industry and related businesses (including automotive sales and services, road construction and maintenance, passenger and freight transportation, and petroleum refining and wholesaling) employed nearly 12.1 million people, approximately one-sixth of the private nonagricultural work force.

Importance of Research and Development to the Automotive Industry

The past decade has been a period of revolutionary change in the motor vehicle industry. In a short time span, the industry has seen the relatively stable environment in which it previously operated transformed into one marked by substantial risk due to rapid and often unpredictable change, including extensive technological change. As a result, research and development has become the critical focal point for the future of the United States automotive industry.

Intense competition from foreign automotive manufacturers has added impetus to the increased activity in research and development in the industry. Both European and Japanese automotive manufacturers engage in substantial research, and their products are perceived as technologically advanced and feature-intensive. Foreign manufacturers also have created an impression of quality construction, derived in part from the application of the latest manufacturing processes and techniques.

These competitors (Japan, West Germany, France and the United Kingdom) are allowed tax credits in their home countries for research and development incurred to develop new products. Their technological gains during the past decade are impressive. As a result, these foreign businesses aggressively compete in our markets. Their share of the domestic passenger car market has risen from 15.2 percent in 1970 to 26.0 percent in 1983. They also have recently launched an aggressive campaign to increase substantially their share of the small and medium-size truck markets in the United States.

This strong competition from overseas has made our domestic automotive industry's development of new products a much riskier business, which has indirectly contributed to the high levels of domestic unemployment and the unfavorable balance of trade ($57.6 billion in 1983)[2] in recent years.

The pressures of foreign competition are compounded by today's fragmented automotive market, with the disparate demands of diversified users arising from changing economic and social conditions, such as fuel costs, safety concerns, and driving patterns. For example, there is a major trend among consumers to drive cars longer and, therefore, to demand improvements in product quality, durability, serviceability and repairability. The mean average age of passenger cars in use has increased from 5.5 years in 1970 to 7.2 years in 1982.

Another major factor influencing changes in the industry has been the tenfold increase in the price of crude oil. The resulting increase in the price of gasoline induced a corresponding surge in the demand for more fuel-efficient vehicles. Experts have estimated that by 1990, between 64 and 75 percent of the cars sold in this country will be compacts or smaller.[3] Since this trend appears directly affected by fluctuations in gasoline prices, however, recent decreases in gasoline prices create new uncertainties for the future course of development of automotive products.

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[2] Business America, Department of Commerce (January 23, 1984).

[3] University of Michigan, UMTRI Research Review (November-December, 1981). Id. (November-December, 1983).

Federal regulation also imposes significant technical requirements on the automotive industry's production facilities and the motor vehicles that the industry produces. The National Highway Traffic Safety Administration (NHTSA) has promulgated 50 federal safety standards that relate to motor vehicles sold in the United States are required to meet. NHTSA also administers 16 additional regulations imposing further requirements, including mileage standards, on motor vehicle manufacturers and dealers. The Environmental Protection Agency (EPA) has promulgated regulations imposing increasingly stringent limits on permissible levels for vehicle emissions of hydrocarbons, carbon monoxide, oxides of nitrogen and particulates. EPA also imposes strict limits on the permissible discharges and emissions from manufacturing plants. Similarly, the Occupational Safety and Health Administration (OSHA) requires that production facilities conform to numerous safety and health standards.

A substantial gas guzzler tax (ranging from $450 to $2,150 in 1984) is imposed on the manufacturer's sale of each automobile that fails to attain specified levels of fuel economy.

Scope of the Automotive Industry's Commitment to Research and Development

In 1975, the industry spent approximately $2.0 billion on research and development. By 1983, that figure had increased to an estimated $4.4 billion.[4]

This enormous commitment is evidenced by extensive research facilities that employ approximately 30,000 scientists and engineers working in such diverse fields as chemistry, physics, engineering (chemical, electrical, mechanical and materials), metallurgy, ceramics and computer science. Newly constructed research facilities contain such items as, (1) wind tunnels for aerodynamic design to increase fuel efficiency, (2) robot testing and development equipment to improve productivity in automotive manufacturing operations, (3) paint research facilities to improve the durability and reduce atmospheric emissions from the application of manufacturers' paints and undercoatings, and (4) massive computer banks to design, engineer and test prospective automotive products.

The automotive industry is substantially committed to basic research, in which hundreds of millions of dollars are spent annually. During 1981, this expense was approximately $246 million on an industry-wide basis. In addition to basic research, enormous research and experimentation expenditures have been made to create new automotive products and also new production processes, i.e., the task of improving the basic concept of the automobile and the methods of its manufacture. During 1981, the industry incurred approximately $4 billion with respect to applied or industrial research and development.

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[4] National Science Foundation, "Research and Development in Industry, 1983" (January, 1983).

Nature of Research and Development Activities in the Automotive Industry

The automotive industry has evolved into an applied high technology business, using new technologies, materials and concepts in the formulation and development of both its new products and its new manufacturing processes. All this activity must be conducted in a business environment that requires this industry to mass produce and sell large numbers of complex products to sophisticated consumers with changing, diverse needs.

Thus, the industry must develop products that respond to: (1) customer preferences with respect to performance, economy, roominess, and styling; (2) federal and state regulations concerning safety, emissions, noise, fuel economy and theft protection; (3) specifications required for export; (4) rapidly-changing concepts in automobile development and design, materials engineering, manufacturing and assembly, and marketing and financing; and (5) worldwide competition that forces severe standards for quality, durability reliability, serviceability and repairability.

Automotive Industry Characteristics Which Influence Research and Development

Three important facts in the automotive industry substantially influence the industry's research and development and make simplified assumptions about automotive products and the manufacture of such products inappropriate. Thus, it is a fact that: (1) both the automotive product and the processes for developing and manufacturing it are much more technically complex than is generally understood; (2) the technology of the automotive product is continually being redefined and improved through the introduction of new models, as well as improved existing models; and (3) many of the functions and features that go into the creation of a new automotive product serve several purposes that may not be evident to the layman.

Complex Products and Production Processes - The typical automobile has between 5,000 and 6,000 major components, and as many as 12,000 to 15,000 total parts, which when brought together to function as one, create a product of extreme technological complexity. Similarly, the manufacturing processes involved in producing a commercially marketable automotive product are quite complicated. It takes enormous research and development to create products and related production processes when there is a complementary relationship between all the major elements of each. As a result, the major portion (approximately 90 percent) of the research and development conducted by the industry focuses on improvement of the product concept.

There is an important side effect from this complexity of product and process in the automotive industry. It is known as the "ripple effect," in which any change made to a product or production process triggers additional changes to other parts in the product and among procedures in the production process. Stated differently, this means that when a component of an automotive product is changed, this may require so-called collateral engineering for several changes radiating to other parts, which in turn influence the production processes involved in one or more parts of the vehicle, which when altered to compensate for the product adjustments, may in turn affect some other component part or process.

For example, durability considerations may result in a change in the bumper configuration on an automobile, causing compensating adjustments in the proposed installation process. The new process may only work by decreasing the height of the bumper which, however, makes the bumper fail government safety requirements, which when rectified will require yet another change to the installation process.

The reverberating effect of product changes such as this is common during the development stage of a new or improved product. Indeed, this example is simplified, since changes to the bumper and its installation process would affect several other components of the vehicle and the attendant installation processes.

Continuous Research and Development Activity - The research and development conducted in the automotive industry is continuous with respect to all aspects of automotive products and their production processes. This circumstance has been emphasized in the last decade because of foreign and domestic competition, the increase in government regulations, the advent of many new technologies, and the increase in sophistication of consumers. New developments in automotive transportation now occur so rapidly that it is easy to assume that each bears little significance to the overall product.

Function Dictates Appearance - It is evident that aside from functional performance, market pressures inject appearance ("style") considerations into the development and production of new automotive products. Appearance is necessarily a subordinate consideration, however, since technical function dictates appearance in the automotive markets of today.

For example, while the fabric used in the interior upholstering of an automobile certainly must satisfy minimum standards of appearance and general attractiveness, choices of fabrics can only be made once the material involved passes numerous tests[5] for safety and durability. Similarly, the general exterior shape and appearance of an automobile, while somewhat influenced by attractiveness, must first satisfy preliminary functional objectives such as passenger and cargo vehicle capacity, crash safety, weight and aerodynamic design for fuel efficiency, repairability, durability and passenger vision.

Thus, appearance is expressed only to the extent that it is compatible with other major functional criteria. Moreover, given the shape and internal complexity of the automotive product, only a relatively few of all the components, some of the items attached to the exterior, even take into account appearance considerations.

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[5] There are at least 37 applicable engineering specifications (e.g., construction, weight, thickness, texture, breaking strength, tear strength, seam-bond strength, set, stiffness, flex-fold, abrasion-taber, abrasion-stoll, shagging, pilling, minking, loose flock, composition, crocking, bleeding, perspiration, spotting, soiling, fading, cleanability, acoustics, UV degradation, sag, shrinkage, odor, installability-workability, deterioration from heat-cold-humidity, wet-flex, cold-flex, compatibility with other interior materials, allergic or other contaminants, ultra-violet deterioration, heat-cold-electric conduction) as well as safety (flammability and slipperiness-crash characteristics), cost, availability and appearance. All of these go into the development and testing of textile materials used in automobile interiors.

Major Areas of Research and Development in the Automotive Industry

Product-Related Research and Development - During the past decade, research and development has made the automobile a feature-intensive product. It performs numerous functions that were not available a few years ago. Moreover, even functions previously available have been refined and expanded, raising them to much greater levels of efficiency and performance. For example, substantial improvements have been made in the following areas:

1. Safety[6] - Always a major concern of automotive manufacturers, automobiles and trucks are far safer than in previous years due to continuous innovations in the strength and durability of materials in the vehicle, better design, more efficient passenger restraints, better tires, and other improvements.

2. Emissions - Pursuant to government regulations, the automotive industry has reduced the amount of controlled substances in automotive exhausts since 1960 by between 75 and 95 percent.

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[6] Some of the many tests required to satisfy government safety standards involve such areas as steering characteristics, transmission performance, interior design - headrest and body restraint devices, auto-body crush resistance, accelerator control, fuel system integrity - engine, gas lines and gas tank, bumper performance, glazing, fire resistance of materials, rear vision characteristics, warning devices, instrumentation sufficiency and viewability, braking characteristics and the integrity of the braking system, adequacy of exterior lights and reflective devices, hood latch system performance, tire performance, windshield system performance - defogging, defrosting, wiping and washing and power window operation.

This has resulted primarily from advances in the development of cleaner burning engines, electronic engine controls and catalytic filter devices in automotive exhaust systems.

3. Durability, Quality, Repairability and Serviceability - Automobiles and trucks are better built to last longer, and they are designed in a manner that facilitates service and repair work. Routine maintenance for new automobiles is now done at intervals of 7,500 and 30,000 miles, rather than 3,000 and 10,000 miles as in earlier years. Some moving parts are now self-lubricating for their entire functional life.

4. Fuel Efficiency[7] - Due to consumer requirements and government regulations (so-called CAFE requirements (Corporate Average Fuel Economy)), this has been a major focus of research and development in the automotive industry. Automotive manufacturers have spent billions of dollars developing new engine designs and types (e.g., small diesel, rotary, gas turbine and electric), as well as seeking to use alternative materials (e.g., aluminum, plastics, graphite and ceramics) to lighten and strengthen vehicles. Substantial improvements in aerodynamic design have also reduced the co-efficient of drag which increases fuel efficiency. More effective synthetic lubricants, as well as alternate fuels, are being developed to help solve potential fuel shortage problems in the future.

5. Theft Prevention - Sophisticated electronic devices now provide automobiles with security systems similar to those in homes and office buildings. Many models now have indestructible serial numbers on major components. Keyless electronic locks and ignitions are recent innovations.

6. New Functions - New functions in automobiles such as communication (e.g., radio

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[7] It is estimated that the industry has incurred a billion dollars of research and development costs for each half mile per gallon improvement in fuel efficiency under CAFE requirements. Since further progress will be increasingly difficult, the projected future costs are expected to rise to a billion dollars for each one-fifth mile per gallon improvement.

telephone) and sophisticated capabilities for early identification of mechanical or electrical problems are also being advanced toward commercial production. These developments are the result of the industry's intensive effort to incorporate the latest electronic innovations into automotive products. In fact, the electronic equipment in the average new automotive product has the capacity to perform more functions than the sophisticated home computers that are now on the market.

Process-Related Research and Development - Revolutionary changes have occurred in the development and production of automotive products. Some areas of substantial improvement are as follows:

1. Computer Design - Computer science now enables new automotive products to be conceived, designed, and even tested to some extent, on computers before such products progress to draft design, mockup, engineering and subsequent development stages.

2. Robotics - Component assembly, welding and painting are several areas in which mass production is being converted to robot operation.

3. Quality Control - Substantial improvement has occurred through the use of microwave, laser, electron beam, and electro-optic surface scanning devices.

4. New Paint and Undercoating Processes - These coatings provide improved anti-corrosive and chip-free characteristics, and they are applied within acceptable plant emission levels.

5. Research & Experimental Equipment - Sophisticated equipment such as simulator computers and wind tunnels are now commonly used in contexts that are comparable to such activities in the aerospace industry.

Delayed or Unrealized Returns from Research and Development in the Automotive Industry

The several forces driving advances in automotive products and production processes, the unique characteristics surrounding the development of new automotive products and production processes, the diversity of technological areas subject to such development, and the rapidity with which such development is occurring, all make technical research in the automotive industry an expensive process in terms of the commitment of equipment and facilities, people, time and, most importantly, funds. On the other hand, the returns when and if realized, are not immediate. Rather it takes years of testing and evaluation to translate new technology into commercial reality.

The development procedures required to produce reliable and effective new products and production processes normally take from six to eight years and involve several major steps, including (1) product conception, (2) clay model design, (3) initial drafting, (4) mock-up testing, (5) prototype testing, (6) initial process formulation, (7) pilot project testing, and, in some cases after commercial production has commenced, (8) reevaluation, testing and retrofitting to solve an unanticipated product problem that surfaces after widespread consumer use. There is substantial complexity in and interplay among each of these major steps. The same development procedures must also be employed to develop and incorporate technical improvements to existing automotive products and production processes.

The MVMA submits that the costs of all these development activities should qualify for the credit under section 44F. Thus, in devising standards for the credit, the following characteristics of the research and experimental activities of the automotive industry should be considered:

1. The products of and processes for automotive production are the subject of continuous research and development to permit the mass manufacture annually of millions of ever-changing, improved products and also to increase productivity.

2. Because of the complexity of both automotive products and their attendant manufacturing processes, the incorporation of a new improvement in one component part or phase usually requires collateral engineering to develop compatible constituent parts or phases. The result of this ripple effect is that neither the new product nor the process is finished from a practical commercial standpoint, until all the technical elements of both are compatible.

3. In today's automotive world, function and performance dictate appearance, which has become a secondary

consideration to safety, fuel efficiency, emissions control, durability and other similar characteristics.

4. Experimentation to develop new automotive products occurs not only in traditional laboratories, but also as a result of street testing. These activities are all necessary to develop a finished new product for commercial production that is safe, effective and reliable. In a few instances, despite the enormous amount of testing and evaluation by both the automotive industry and government experts, extensive consumer use has identified some important problem which was not previously discovered, and which requires further research and experimentation to resolve.

5. Because of their nature, function and general importance to our society, automotive products (as well as automotive manufacturing processes) are perhaps the most regulated of all durable goods. Government regulations require specified levels of uniform improvement of automotive products. Compliance with the myriad governmental standards for performance and function substantially contributes to the automotive industry's enormous research and experimentation costs.

These facts are often obscured from or overlooked by the general public. In other words, there is a substantial general misconception that much of the development activity in the automotive industry is not true technical research and experimentation. This fundamental misperception was evident in both the legislative history of the unenacted, Ways and Means Committee version of the research and experimental tax credit provisions (§44F, Internal Revenue Code), enacted in the Economic Recovery Tax Act of 1981, and, most notably, in Proposed Reg. §1.174-2, concerning the definition of qualified research and experimental expenditures, which was published by the Treasury on January 21, 1983.

Application of Section 44F to the Automotive Industry

Treasury Position

On May 27, 1983, the Assistant Treasury Secretary for Tax Policy testified at the Senate Finance Committee's hearing concerning, among other legislative proposals, the permanent extension of the tax credit for incremental research and experimental expenses (S. 738). In the Assistant Secretary's statement, he described the objectives of the credit, as follows:

> Congress enacted the tax credit for incremental research and experimental expenditures in order to encourage industry to undertake the risky research and experimental activities that may lead to productivity-enhancing innovation. The need for such activities cannot be disputed; innovation is essential if the United States is to retain and improve its competitive position in the world economy.

* * * * *

> "R&E" is a term used to describe an organized activity undertaken by a firm to develop new products and services or to modify existing products and services. In addition, R&E includes the creation of new or modified production and marketing techniques. Commercial and industrial R&E leading to technological innovation is unquestionably beneficial to the economy. The more successful R&E effort in the economy, the higher will be the rate of productivity growth.
>
> Normally, it would be expected that business will invest in R&E to the point that the expected return on investment in R&E is equal to the expected returns from other investments. However, the level of profit-motivated R&E frequently will be inadequate because businesses may not enjoy the full return realized from their innovation. For this reason, government intervention * * * is warranted.
>
> Broad government support of R&E is particularly essential in the area of "Basic research." * * *.
>
> Similarly, commercial and industrial R&E also may add to the stock of knowledge that may be used by others, with the result that the innovator will not enjoy the full economic return from its efforts. Therefore, government aid to industrial and commercial R&E also is appropriate.

The Assistant Secretary also stated that the Administration "strongly supports the objectives of the credit," and he urged that the R & E Credit be "extended to enable taxpayers to plan their research and experimentation activities with certainty that the credit will be available."

The experimental activities conducted by the automotive industry satisfy the objectives suggested by Mr.

Chapoton. In aggregate terms, its research and experimental expenditures are primarily applied or industrial research to produce new and improved products and manufacturing processes. These programs are commercially and operationally risky, because they require the translation of research developments in high technology into the realities of sophisticated products produced by mass production processes. This risk is increased today not only because of the substantial amounts of expensive capital investment involved, but also because current circumstances indicate continuing rapid change in new product technology and markets. It bears emphasis that each new improvement developed with respect to an automotive product usually requires the development and testing of a new manufacturing process before the improved product can become commercially viable.

MVMA General Comments

The provisions of S. 2165 make significant progress toward providing a more precise and workable definition of qualified research that would tend to neutralize previous misperceptions about research and experimentation in the automotive industry. These provisions are based in part on Financial Accounting Standards Board Statement No. 2 (October, 1974), which provides general guidelines for identifying research and development expenses for financial accounting purposes. Although it is appropriate, as a beginning, to draw on the experience reflected by FASB No. 2 to develop a definition of qualified research under section 44F, the different objectives and administrative considerations underlying FASB No. 2 and section 44F suggest that the two definitions need not be identical. Indeed, this point is already clarified to some extent in the provisions of S. 2165.

The changes in statutory language suggested by the MVMA are simply an effort to provide a clearer, more practical business approach to the definition of qualified research for purposes of the tax credit. They are supportive of Congress' and the Administration's concern over the competitive position of United States industry, since applied or industrial research is an important prerequisite to both new or improved products and better productivity. They are also fundamentally consistent with the precepts of FASB No. 2 and with existing tax law which bears on the definition of research and development. The suggested changes should provide more equitable and administrable rules.

Significantly, the automotive industry suggests revisions in the statutory definition of qualified research expenditures to ensure that several characteristics of the automotive industry's activities are given proper effect. This approach is preferable to relying on future regulations, because the industry's revised definition is brief and will permit immediate implementation. The recommended statutory provisions are also appropriate, in light of the shortcomings of Proposed Reg. §1.174-2, which drew substantial public criticism for departing from the Congressional intent evident in the legislative history to section 44F.

Proposed Changes to S. 2165

1. We recommend that proposed section 44F(d)(2)(A),(B)and(C) be revised as follows:

> (2) EXCLUSIONS.--The term 'qualified research' does not include--
>
> (A) any activity with respect to a new or significantly improved business item after such business item has been fully developed to the point where it constitutes a finished business item which meets the specific functional and economic requirements of the taxpayer for that item and is ready for commercial production, sale and use;
>
> (B) any development of plant processes, machinery, or techniques for commercial production of a new or significantly improved business item, except where such process, machinery, or technique itself constitutes a new or significantly improved business item or is a necessary prerequisite to the commercial production of a new or significantly improved business item (within the meaning of paragraphs (3) and (4) of this subsection);
>
> (C) any adaptation of an existing business item to a particular requirement or customer's need as part of a

> continuing commercial activity, where such adaptation will not result in a new or significantly improved business item, either immediately or as used in further manufacture, of the taxpayer~~,~~ or the taxpayer's customer;

The revision to subparagraph (A) is suggested to reflect the fact that the development of a new business item is not complete until such item is susceptible of commercial production. For industries like the automotive industry, this means commercial production on a mass scale.

The revision to subparagraph (B) allows for the cost of collateral engineering by the taxpayer for a component part that must be reengineered to make it compatible with a new or significantly improved business item. That is, collateral engineering is not qualified research unless the taxpayer's activities produce a new or significantly improved business item, or are a necessary prerequisite in the further manufacture of a new or significantly improved business item by the taxpayer or the taxpayer's customer.

The revision to Subparagraph (C) confirms the principle in (B), and makes it clear that the new or significantly improved business item may be that of the taxpayer's customer. Thus, if collateral engineering is necessary with respect to a part, manufactured either internally or by an outside supplier, that is a necessary prerequisite to produce a new or improved product, that collateral engineering constitutes qualified research. Any other interpretation would lead to distinctions between fully integrated and non-integrated manufacturers, which would be undesirable.

2. We recommend that proposed section 44F(d)(3) be revised as follows:

> (3) NEW OR SIGNIFICANTLY IMPROVED.--A business item (as defined in paragraph (4)) sought by the taxpayer shall be 'new or significantly improved' if--
>
> (A) such business item is developed by means of the process of experimentation, including testing in search for or evaluation of alternatives ~~and,~~ which seeks to achieve new characteristics or improvement of the business item relating to such factors as function, safety, performance, reliability, quality or cost; and,
>
> (B) ~~the predominant portion of the new characteristics or improvement of such business item sought by the taxpayer relates to such factors as function, performance, reliability, quality, or cost, rather than to style, taste, cosmetic, or seasonal design factors.~~ the principal purpose of such process of experimentation is not to develop style, taste, cosmetic, or seasonal design changes.
>
> A change in a business item which seeks to comply with a government order or regulation relating to environmental, energy efficiency, safety, noise or similar standards, shall be considered to relate to a new or significantly improved business item.

These revisions are suggested specifically to refine the definition of the type and quality of the change in a business item that constitutes a new or significant improvement to such business item. The intent of the proposed language is to make clear that any research and experimentation process to effect additional functional utility of the business item, in contrast to its improved appearance, is considered to create a new or significantly improved business item unless the principal purpose of the process was to improve the item's appearance. When only secondary and subordinate consideration is given to aesthetics to encourage consumer acceptance of technological improvements, such consideration should not disqualify the research expenditures which resulted in the functional enhancement of the new or significantly improved item. As proposed the new provisions should minimize the record-keeping burden on taxpayers by avoiding the complexity of the "predominant portion" language.

The proposed language also provides a safe harbor for research activity undertaken to comply with a government order or regulatory requirement concerning safety, environmental, energy efficiency, noise or other areas of governmental control. This revision is based on the assumption that any government-required change in a product or process is to improve such product or process.

4. We recommend that proposed section 44F(d)(4) be revised as follows:

> (4) BUSINESS ITEM.--The term 'business item' means product (whether or not constituting

> tangible personal property), process, technique, formula, invention, or a ~~significant~~ component part or element of a product or process, for sale, lease, license, or use by the taxpayer in a trade or business: Provided, however, That computer software that is separately developed by the taxpayer solely for internal use of the taxpayer (other than for use in (i) qualified research (within the meaning of this subsection (d)), (ii) a production process, or (iii) the performance for customers of services of which such software together with the corresponding hardware is the predominant component) shall be treated as a business item for purposes of this section to the extent provided for by regulations to be prescribed by the Secretary.

This revision is suggested because there is no apparent reason for using a subjective criterion, such as "significant," to determine what constitutes a business item. The term "significant," modifying "component part or element," is indefinite and can lead to inappropriate results. To illustrate the potential problem, an improvement to the identical component part used in two different contexts arguably may produce contradictory results when the "significant" test is applied. An improvement to a clock may be viewed as the improvement of a significant component part of a clock radio, but not of a vehicle or boat under this standard. This would mean, presumably, that an integrated producer of an automobile and clock would be disadvantaged relative to an unintegrated producer of an automobile who purchased the clock from a supplier. Such discriminatory and inequitable treatment is counterproductive, as well as administratively unworkable.

CONCLUSION

In its current form, S. 2165, relating to the revised definition of qualified research, makes commendable progress toward removing the uncertainty associated with the eligibility of research costs for tax credit treatment under current law. The additional suggested revisions set forth hereinabove provide more precision with respect to the definition of qualified research and also ensure fair and administrable rules for all taxpayers. The revised definition serves Congress' purpose for the research tax credit by providing United States businesses with a meaningful economic incentive to enhance productivity and compete effectively with their foreign rivals. Accordingly, the MVMA urges that S. 2165 be revised as recommended and enacted into law.

Submitted on behalf of the
Motor Vehicle Manufacturers Association

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STATEMENT OF FREDERICK HOWARD, VICE PRESIDENT AND TREASURER, JOHNSON & HIGGINS, ON BEHALF OF THE COALITION OF SERVICE INDUSTRIES, WASHINGTON, DC

Mr. **Howard**. I am Frederick Howard, treasurer of Johnson & Higgins. I am here today on behalf of the Coalition of Service Industries, which was founded in 1982, and the main purpose of which is to foster an awareness of the importance of services in the world economy. I would like to take this opportunity to commend both the chairman and Senator Danforth for your leadership in focusing congressional attention on the problems of lagging productivity and the difficulties of competing in the world market, and this is particularly true not only with respect to the R&D credit but also in respect to DISC, FISC, the exporting trading companies, and the Foreign Corrupt Practices Act. Now, in respect to your two concerns about should the R&D credit be made permanent and how the definition should tightened or loosened, I would like to say that the coalition does support a permanent credit. On the question of the definition, I asked Mr. Chapoton in the hall a few minutes ago whether he would support the inclusion of services that were truly innovative. And he thought about it for a while, and he said yes. And that is what I would really like to——

Senator **Chafee**. He will go out and think about it some more, I think. [Laughter.]

Senator **Danforth**. We have never heard him say yes. [Laughter.]

Mr. **Howard**. I wish you had been with me. Now, a couple of lawyers very close to your S. 2165 tell me that services are already included, and I guess they are bringing that in under the word "product." Perhaps, including something like intangible product. I noted that in your Congressional Record statements on introducing the bill you cited with favor the FAS-2 definition. And the FAS-2 definition does include the word "services" as well as "products". Now, let me say that, as a medium-sized company we don't know whether the products answers that we offered qualify for the current credit, and under S. 2165 I think we have a better idea, but it is not entirely clear. So, we would like you to modify the definition under business items just by the inclusion of that one word "services." And we are talking about services that are truly innovative.

I must point out that productivity and services are lagging behind productivity and manufacturing, and it is causing productivity in the whole economy to be less than what it should be. There are also countries out there—and I will mention Singapore, because this is something very new—which has targeted services with the future expansion of their economy, and they offer a double tax incentive for all R&D investments, in services as well as manufacturing. So, there is one country that has already targeted R&D, I think, for services. Professor John—of MIT has mentioned that $1,000 invested in a service worker is twice as productive as $1,000 invested in an industrial worker.

Prices for services have increased at a faster rate than prices for commodities in the last few years, so there is an inflation aspect of this as well. So, all I am asking is that let us not overlook a sector that accounts for more than 50 percent of the American economy.

Let's include the word "services" and, if there are definitional problems beyond that, I think they can be worked out. Thank you.

Senator CHAFEE. Thank you, Mr. Howard. As you know, from our past dealings, I am deeply sympathetic to services and recognition of them both under FISC and all kinds of laws. I must say I have a real trouble with this—we have got a budgetary problem, as everybody knows in the United States, and we have got some definitional problems on this legislation. When Treasury is not supportive of legislation, it makes it difficult to get through, regardless of what party is in charge here. So, we will look into what you have suggested. I personally have some problems with it, extending R&D to services. I am not totally down on it. I had just not thought of it before. I will be curious as to what Senator Danforth has to say.

Senator DANFORTH. I am impressed with Secretary Chapoton's comments, if we want to talk to him, and see what we can do on this.

Mr. HOWARD. Let me say that one of the reasons the coalition was founded was because services generally do get overlooked in these types of initiatives, but the economy is really an exchange of goods and services, and it is very difficult to separate one from the other when you are talking about services.

Senator DANFORTH. Give me some examples, if you could, of R&D and services.

Mr. HOWARD. Almost all the companies in the coalition product software, which we sell or we use in our means of production. So, I think software is a clear example. Another example would be a product, let's say, which reduces the cost of financing for our customers or a product which reduces the cost of insurance for our customers.

Senator CHAFEE. How could you ever quantify that? A bunch of smart people are sitting around up in Metropolitan Life, and there is a lot around variable annuity. I was thinking at home last night about this, and I talked to my wife about it. [Laughter.]

Senator CHAFEE. And it is a whale of an idea. Let's run some computer runs on that, and so forth so they come up with this thing. Now, how the dickens do you say you can get an R&D tax credit for that?

Mr. HOWARD. Senator, we really employ the same types of individuals that, let's say, a typical high tech company would. We employ engineers, we employ mathematicians, and actuaries. It has a scientific bent. They produce a slightly different product or service, depending on how you would call it, it is true, but it is innovative and it is productivity enhancing. And I think, rather than just sort of ignoring that broad area of activity out there, what we should do is spend some time trying to see if we can come up with a usable definition.

Senator CHAFEE. Let's take a look at advertising. Advertising is a service industry. and thank goodness we have got good advertising companies here which export their products. So, they are all sitting around, and that is what they are paid for. I suppose you could say that an advertising concern is all R&D. They are all meant to have smart ideas, aren't they? [Laughter.]

Mr. HOWARD. I think competition itself goes for an electronics firm, as it would be for the members of our coalition. This forces us constantly to come up with new products and new services. Agreed. But the R&D credit is really designed to increase that activity, enhance it. And as I say, since the economy is an exchange of both goods and services, I don't think you are going to get the maximum impact from your R&D credit if you just look at goods as opposed to services.

Senator **Danforth**. I don't think we intended this to cover an advertising person brainstorming an advertising campaign.

Mr. **Howard**. No, and I think if you are talking about a product or a service, that is if it is just for one customer, you are right. You would not want to include it, but I am talking about a product that would have an impact over the economy as a whole. I think a form of credit enhancement which allows, let's say, hospitals to issue bonds with a higher rating and therefore a lower interest rate, that is a type of product which would have a great impact.

Senator **Chafee**. Well, you are always coming up with new proposals.

Mr. **Howard**. Well, if you read the book "Invisible Banker," you realize that many insurance companies, with few exceptions, are really in the back water. They haven't spent as much in R&D as they should.

And productivity—Professor Kendrick of George Washington University, who is an expert on productivity, has written a statement, and we would be glad to give it to you, citing how far productivity is actually lagging in the service sector.

Senator **Chafee**. I support increased productivity. I want that clear. [Laughter.]

Senator **Chafee**. The problem is—as you heard Mr. Chapoton this morning—how the dickens do we define these things? It is hard enough in Mr. Moore's business. Brad East, who is an executive officer of this company, is very familiar with it and knows all the ins and outs, and he is probably spending some of his time coming up with new products or contributing to them, but it is hard enough to figure that out. He has got a small engineering section, I suppose, in his company, but you can at least locate that. I don't know. That is easier. They have got to build a new aerodynamic tunnel to wind test these models. Some new kind of paint they are going to develop, and you can come close to it. But you have brought a real challenge to us. You must have caught Mr. Chapoton off stride or something. [Laughter.]

Mr. **Howard**. Mr. Chapoton mentioned in his list of companies, trade companies, finance companies, and other companies that were currently using the credit. So, he didn't take the position that they shouldn't, and I questioned him on that—as I say, at the break—and he thought that as long as the services were truly innovative, they should qualify.

I must say that in our company the stuff that we offer is a specific software program, and we sell that to our customers. That is something that, as I understand it, will qualify under the new bill. But we also offer, let's say, an actuarial package which will probably have a bigger impact in terms of our customers in reducing their costs, and I am not sure whether that qualifies. I am not sure whether that is part of services.

Senator DANFORTH. And I haven't thought about it either, but really what this was intended to do was to cover real research and development.

Senator CHAFEE. I don't believe that. [Laughter.]

Senator DANFORTH. Developing something——

Senator CHAFEE. John, I have got to catch a plane, so why don't you continue on here? I want to thank you all.

Senator DANFORTH. I want to thank you all, too. We have been here since 9:30 a.m., and it has been just terrific testimony from this panel.

Senator CHAFEE. We thank you very much.

[Mr. Howard's prepared statement follows:]

STATEMENT OF FREDERIC K. HOWARD
ON BEHALF OF COALITION OF SERVICES INDUSTRIES (CSI)

S.2165 "High Technology Research and Scientific Education Act."

My name is Frederic K. Howard, Vice President and Assistant Treasurer of Johnson & Higgins. I am appearing today on behalf of the Coalition of Service Industries, Inc. ("CSI"). The CSI consists of 29 major U.S. service corporations which represent a wide cross section of the service industries of the United States including brokerage, consulting and telecommunications firms. A list of member companies is attached to my statement.

When the CSI was formed in 1982, its mandate was to 1) foster a public awareness and understanding of the enormous contribution service industries make to U.S. economic growth, job-creation, and balance of payments, 2) identify and address public policy issues affecting the growth of service industries, and 3) contribute to the formulation of a coherent national policy that permits service industries to compete with foreigners on an equal basis in the international service market.

A. Importance of Service Sector R&E.

When Congress enacted the 25 percent incremental research and experimental (R&E) tax credit in 1981, the Report of the Senate Finance Committee clearly stated that the purpose of the research and experimental tax credit is to help overcome the reluctance of business "to allocate scarce investment funds for uncertain rewards" of research projects. (S. Rpt. 97-144, at page 77.) R&E investments can be very risky for service companies just as they are risky for manufacturing companies. Therefore, extension of this tax credit to ensure that it does not discriminate against services is entirely consistent with this intent. The objective is equally applicable to service companies as it is to manufacturing or high technology firms.

Moreover, research and development activity by the service sector has an even greater impact on the nation's economy than that for manufacturing. According to a recent study by Dr. Charles Jonscher of the Massachusetts Institute of Technology, each $1,000 invested per service worker in a new technology is twice as productive as the same $1,000 invested per industrial worker on, for example, machine tools or conveyor belts. Professor John Kendrick of George Washington University, a leading productivity expert, believes that expansion of the R&E tax credit to avoid discriminating against services would be very beneficial to overall efforts to provide non-inflationary economic growth.

Research and development activity provides the impetus for technological progress which, in turn, is the chief force behind rising productivity. The importance of R&D to productivity growth in our country, coupled with the importance of the service sector to the economy, means that the continued growth in our economy is dependent on increased R&D by the service sector. The drafters of the R&E credit justified passage of new Section 44F on the grounds that "spending for [research and development] has not been adequate." (S. Rpt. 97-144 at 77.) Research expenditures for the service sector have similarly "not been adequate."

Research and development in services can also be very important in alleviating the U.S. trade deficit. The trade deficit stood at $69 billion in 1983, the largest in history, according to the Department of Commerce. Some predict the deficit will rise to $174 billion by the year 1990. Services can play an important role in reversing this trend. Historically the U.S. has exported more services than any other nation. In 1970, our share of this trade was 20 percent. However, in 1980, our share declined to 15 percent. We attribute this decline in large part to the highly competitive nature of the international marketplace for services. The only way to meet this challenge is for U.S. services companies to become more innovative, and that requires research and develoment expenditures.

If the U.S. continues to lose its competitive edge in service exports, not only will the trade deficit worsen, but also a substantial number of U.S. jobs will be lost. Services industries are highly labor intensive. The Department of Commerce estimates that for each $1 billion in trade, an average of 25,000 jobs are created in the U.S. Since the service sector is on average more labor intensive than other industries, even more than 25,000 jobs are reduced for each $1 billion in trade lost to the service sector.

The Congressional Budget Office (CBO) published a report last month which highlights the low level of federal government support to service industries. (CBO, "Federal Support of U.S. Business" (January 1984).) For example, services including finance, insurance and real estate rank the lowest of all U.S. business sectors in receipt of direct expenditures from the federal government (pp. 52-3). This sector is also at the bottom of the list for receipt of targeted tax expenditures (pp. 53-4).

We also must face the fact that American businesses in general are spending less on R&E expenditures. In 1965, U.S. firms spent 2.9 percent of the GNP on R&E. By 1982, R&E spending was down to 2.6 percent of GNP. This occurred while spending by our international competitors was on the rise. For example, Singapore is currently debating the feasibility of providing additional governmental incentives to its service sector. The country's Economic Development Board expects these incentives to pass within the next few months. Their Economic Expansion Incentive Act already provides a double tax deduction for research and development costs which includes the services industries. When military R&E is subtracted from the totals, the U.S. is now being outspent on civilian R&E by its major industrial competitors such as Japan, France and West Germany. The potential for services industries helping close this gap is tremendous. Additionally, maximum productivity improvement in the manufacturing sector will be difficult to achieve without access to the quickest and most efficient services.

B. Recommended Amendment to S.2165, "High Technology Research and Scientific Education Act."

In accordance with the financial accounting definition of research, the Coalition of Service Industries (CSI) recommends that current law and S.2165 be amended to incorporate the well-established accounting definition of research which specifically includes research expenditures incurred in developing new services. Financial Accounting Standards Board (FASB), "Statement of Financial Accounting Standards No. 2, Accounting for Research and Development Costs," (FAS-2).

Paragraph 8 of FAS-2 specifically defines "research" as follows:

> a) Research is planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a new product or service (hereinafter "product") or a new process or technique (hereinafter "process") or in bringing about a significant improvement to an existing product or process.

(emphasis added.)

In contrast, section 102 of S.2165 does not specifically refer to expenses incurred in developing new services in defining qualified research expenses. Under S.2165, much of the FAS-2 definition is used. However, instead of referring to products (in which the FASB includes services) and processes, the concept of "business item" is used in S.2165. The definition of "business item" does not specifically include services. CSI recommends that the definition of "business item" specifically state that "product" not only includes intangible property, as provided in the bill, but also services as provided in FAS-2. We agree with the conclusion of the "Technical Explanation of Revised Definition of Qualified Research for R&D," reprinted in the Congressional Record on introduction of S.2165, that "the FAS-2 definition has proven a useful definitional tool in the financial accounting context and constitutes a system with which taxpayers performing R&D generally are familiar." Congressional Record S 17012 (Daily Ed. November 18, 1983). We recognize, as reflected in the legislation, that some further restrictions should be made to the FAS-2 definition; however, we feel that retaining the FAS-2 definition's specific reference to services would not be inapposite to the purpose of the R&E credit.

In summary, for the reasons stated above, CSI respectfully urges that your committee revise the R&E tax credit to ensure that the credit does not discriminate against service industries. This will help our service firms retain their competitiveness both at home and abroad. Service firms, just like manufacturing companies are reluctant to risk scarce resources for the uncertain rewards of research and development. The extension of the R&E tax credit to services will help offset this reluctance. Furthermore, extension of the credit is consistent with existing financial reporting standards and consistent with Congressional intent in enacting the credit. As services become an increasingly dominant part of the economy, efforts to boost overall U.S. productivity must reverse current trends and begin focusing on the service sector to the same extent as the manufacturing sector.

We on the CSI Tax Task Force are available to assist you and your staff in every way.

Thank you for this opportunity to present our views.

COALITION OF SERVICE INDUSTRIES, INC.

LIST OF MEMBER COMPANIES

AMERICAN EXPRESS COMPANY
James D. Robinson, III, Chairman and CEO

AMERICAN INTERNATIONAL GROUP, INC.
Maurice R. Greenberg, Chairman and CEO

AMERICAN MEDICAL INTERNATIONAL, INC.
Royce Diener, Chairman and CEO

AMERICAN TELEPHONE & TELEGRAPH COMPANY
William M. Ellinghaus, President

AT&T INTERNATIONAL, INC.
Blaine E. Davis, Director of Strategic Planning

ARA SERVICES, INC.
Joseph Neubauer, President and CEO

ARCHER DANIELS MIDLAND COMPANY
D. O. Andreas, Chairman of the Board

BANK OF AMERICA
Leland S. Prussia, Chairman of the Board

BBD&O INTERNATIONAL, INC.
Bruce Crawford, President and CEO

BECHTEL POWER CORPORATION
Jack Barnard, Vice President and Director

BENEFICIAL MANAGEMENT CORPORATION
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CIGNA CORPORATION
Wilson H. Taylor, Executive Vice President

CITIBANK, N.A.
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Charles Steel, Managing Partner

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Lewis Rubin, President and CEO

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J. Robert Fluor, CEO

INTERNATIONAL BUSINESS MACHINES CORPORATION
John R, Opel, Chairman of the Board

THE INTERPUBLIC GROUP OF COMPANIES, INC.
Philip H. Geier, Jr., Chairman and CEO

JOHNSON & HIGGINS
Robert B. Hatcher, Jr., CEO

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PHIBRO-SALOMON, INC.
David Tendler, Co-Chairman and CEO

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Charles I. Hiltzheimer, Chairman and CEO

SEARS, ROEBUCK AND COMPANY
Edward R. Telling, Chairman and CEO

YOUNG AND RUBICAM, INC.
Edward Ney, Chairman of the Board

STATEMENT OF CONGRESSMAN JAMES M. SHANNON
BEFORE THE SENATE COMMITTEE ON FINANCE
FEBRUARY 24, 1984

I appreciate the opportunity to let you know of my support for S. 2165, the High Technology Research and Scientific Education Act. As I am sure you know, I have introduced the same bill in the House of Representatives, and I would like to tell you why I think it is important that Congress pass this legislation this year.

One of the things that I have tried to do as a member of the House Ways and Means Committee is to find ways in which we can use the tax code to encourage the business community, the academic community, and government at all levels to work with each other to find solutions to some of the problems that are facing us. Among those problems has been encouraging businesses to undertake more research and development--particularly basic research--so that we can continue to compete successfully with countries like West Germany and Japan. These countries have been pouring huge amounts of money into research and development in an attempt to take away our leadership in technical fields and to beat us out in world markets.

Another problem has been the constant struggle of colleges and universities to acquire both qualified faculty and up-to-date equipment for their math, science, and engineering departments. These difficulties are aggravated by the fact that this kind of equipment often becomes obsolete in a short period of time, and by the reality of better salaries in private industry for people with advanced degrees in these fields.

Two provisions that I sponsored in 1981 and that we included in the Economic Recovery Tax Act that year provided a basis for dealing with these problems. One was the R&D credit, which is equal to 25% of a company's increase in R&D spending over a rolling base period. As a special incentive to basic research, 65% of a company's payments for basic research to colleges and universities may be counted in its R&D expenditures for purposes of the credit. The other provision was the special charitable deduction for corporate donations of new scientific and technical equipment to colleges and universities for research and research training purposes.

The R&D credit was enacted with a 1985 sunset date so that we could assess how well it was working. There is no question in my mind that the credit has worked and worked well. At the time the credit was enacted, research in this country had been stagnating. Between 1968 and 1979, expenditures for research and development had remained at a stable level in constant dollars, fluctuating between $19 billion and $22.8 billion. Civilian R&D had remained at around 1.5% of GNP since 1968, while in Japan it had grown to 1.9% of GNP and in West Germany,2.3%. The consequence of this was a steady decline in U.S. productivity during this period.

In the past few years, the situation has greatly improved. The annual survey of business R&D spending conducted by the McGraw-Hill Company showed a 16.5% increase in R&D spending in 1981, an 8.4% increase in 1982, and a projected increase of 8.2% for 1983. It is important to consider these figures in the light of contemporaneous economic events. The boom in R&D spending that was getting underway in 1981 collided with the arrival of the recession. But even in the midst of a severe recession, companies continued to substantially increase their R&D spending. This runs directly counter to the usual trend during and shortly after a recession, which is to cut back spending for both capital assets and R&D. Capital spending was indeed cut--but R&D spending kept on rising.

I can't say for sure that the R&D credit was responsible for those increases. But the discussions I have had with business people, particularly with representatives of high tech firms in my own district, make me confident that the credit was at least a significant factor in what have often been dramatic increases in R&D spending.

The R&D credit is not perfect, however. We have found that in some cases it is too restrictive, preventing some companies that should be able to utilize it--particularly small, start-up companies--from doing so. In other cases it has not been restrictive enough, allowing firms to take the credit for activities that cannot really be considered innovative reserarch.

The equipment donations deduction is not perfect either. It has proved to be so narrowly drawn that it is difficult to realize. And if we expect our colleges, universities, and other secondary institutions to be able to give students adequate training in engineering, computer science, and the physical and biological sciences, it is absolutely essential that we provide corporations with every possible incentive to give them the necessary equipment--and make sure that the schools are equipped to receive it.

Right now schools are training their students on equipment that is often ten or twenty years out of date. Students are learning to use equipment that they will never work with in their future employment, and the employers who hire them find they have no experience with the equipment they will use. At a time when their budgets are stretched to the limit, there is no way these schools can afford to modernize their labs themselves; the cost runs into the millions.

Even Harvard, one of the best endowed universities in the country, finds this to be a serious problem. A member of my staff toured Harvard's science labs last summer, and everywhere she went she heard the same thing from the university officials: "This piece of equipment is impressive, but it's obsolete. The latest models can do much more and we could do much better research, and better teaching, if we had them. But there's no way we can afford to buy them now."

This situation not only makes it difficult to maintain basic research efforts and to give students adequate training, but also compounds the problem of attracting and retaining faculty members. It is just too hard for some of them to resist the higher salaries and the more up-to-date research facilities that private industry can provide.

S. 2165/H.R. 4475 is intended to improve the incentives for increased R&D, basic research, and donations of scientific equipment to postsecondary schools in a way that both Democrats and Republicans could support. And that support is becoming evident: to date H.R. 4475 has attracted 95 House cosponsors, including a majority of the Ways and Means Committee. These are pretty evenly split between Republicans and Democrats. Thus, this legislation offers the prospect of a real bipartisan effort to give industry and education a boost.

Perhaps the most important feature of the bill is that it makes the R&D credit permanent. I cannot emphasize strongly enough how important this is. My contacts in the high technology industry tell me that the R&D planning cycle is typically about three to five years. Thus the 1985 sunset is already affecting spending decisions. An extension of three more years as the Administration proposes isn't really very helpful. Businesses simply have to have the certainty of a permanent credit to do their long-term R&D planning.

The bill would solve some of the problems that have developed with the operation of the credit. It would tighten up the definition of research for credit purposes so as to knock off those uses we really didn't intend. It would make depreciation of research equipment an eligible expense for the credit, thus making the treatment of purchased equipment consistent with that of leased equipment, and, as a tradeoff, would eliminate the special three-year ACRS category for such equipment and place it in the standard five-year category. And the bill would make the credit more widely available by allowing it to be used for the first time by start-up corporations which lack an active, ongoing business but wish to do the research to create one--this is where some of the most innovative efforts are occurring--and by facilitating its use by qualified joint research ventures.

S. 2165/H.R. 4475 would substantially improve the incentive for corporations to contract their basic research to colleges and universities by increasing the expenditures counted under the current credit to 75% and by creating a new credit equal to 25% of that portion of a corporation's payments to colleges, universities, and other qualified tax-exempt research organizations that exceeds a fixed, historical floor. There has been a serious decline in basic research in this country over the past few decades: U.S. industry now spends only 3.6¢ of every research dollar for basic research, compared with 7¢ in the mid-1960's. As a result, universities, who conduct a large portion of this country's basic research, have found that only 3% of their research money comes from industry now, as opposed to 11% in the 1950's. I think that this new incentive could help turn that trend around.

The equipment donations section of the bill would remove some of the obstacles that have kept this deduction from being as effective as it might be. It makes it clear that the equipment can be used by any postsecondary school, including vocational schools and community colleges. It allows the equipment to be used for direct education as well as for research and research training, thus fulfilling the original purpose of the bill as it was introduced in 1981 and eliminating the confusion that has arisen over the line between research training and direct education.

The donating corporation would be allowed to take a deduction for the donation of software as well as for the hardware it would accompany. A computer, after all, is only as useful as the program that is fed into it, amd the donation of a computer without the software to accompany it can prove to be an empty gift. Similarly, the gift of a computer can be useless to a school if the school cannot afford the cost of installing, maintaining, and repairing it--so the bill allows a corporation to donate and take a deduction for a standard service contract along with the donated equipment. And the bill would expand the range of corporate donors by allowing not only companies that manufacture or sell new equipment, but also companies that would like to donate equipment less than three years old that they have used in their business to claim the deduction.

Finally, the provision excluding from taxation the value of scholarships, grants, and forgiven loans to graduate students in math, science, and engineering who have received this assistance on condition that they agree to teach those subjects for a certain period of time would both help these students to receive the training they need and help to increase the pool of faculty in these areas.

I know that everyone's focus this year is on deficit reduction measures, and that any other type of proposal will have to have some pretty strong justification to get passed. But as I have indicated above, I firmly believe that this bill can be justified--and so, judging by their cosponsorship, do several dozen members of both parties. The bill is pretty cheap compared to, say, ACRS, which cost us billions of dollars and has not, as far as I can see, done much to improve the economy. And the return will be great: increased productivity, a better trained workforce, continuing competitiveness in world markets. If we are going to use the Internal Revenue Code to encourage certain activities, this is the kind of incentive we ought to be providing.

I would also like to mention another bill that you are considering, S. 1857, regarding the tax treatment of private foundations. S. 1857 is the Senate version of a bill that Representative Conable and I sponsored in the House, H.R. 3043. Many of the provisions of that bill were incorporated, either intact or in modified form, in H.R. 4170, and I would very much like to see the Senate approve these provisions as well. Private foundations have played an essential role in fulfilling many of our society's needs over the past few decades, and we must ensure that they will be able to go on doing so for many years to come. The foundation provisions of the Tax Reform Act of 1969 have worked well for the most part, and foundations have been acting responsibly under these provisions. However, S. 1857 would remove some provisions that have presented obstacles to the operation of private foundations and would do so, I believe, without diminishing the effective regulation of these organizations. I hope that the Finance Committee will act favorably on this bill.

AT&T

R. N. Flint
Senior Vice President and
Comptroller

550 Madison Avenue
New York, NY 10022
Phone (212) 605-5500

March 8, 1984

The Honorable Robert J. Dole
Chairman
Finance Committee
144 Hart Senate Office Building
Washington, D.C. 20510

Re: S. 2165, the High Technology
Research and Scientific Education
Act of 1983

Dear Chairman Dole:

We are submitting this comment on the "High Technology Research and Scientific Education Act of 1983" on behalf of American Telephone and Telegraph Company (AT&T) and its affiliates. AT&T is the parent of a group of companies that develop, manufacture, and market on a worldwide basis information systems and services including telecommunications products. One of our companies, AT&T Bell Laboratories, has been and continues to be a driving influence behind the nation's and the world's contributions to telecommunications and information systems technology. It devotes substantial efforts and resources to fundamental information-age technologies, including microelectronics, software systems, digital systems and photonics, as well as related fields. We have a long-established commitment to wide-ranging and thorough scientific research which we believe is essential to the increasing needs of the information industry and the general well-being of the nation. Therefore, we have a keen interest in the "High Technology Research and Scientific Education Act of 1983".

Briefly, (I) we support the proviso that the R&D Tax Credit is to be made a permanent part of the tax law. (II) We agree that "qualified research" for the tax credit should be defined in the bill rather then left to future regulations. However, we feel "qualified research" should include certain post-production costs. (III) We believe that there should be no separate restrictions on the eligibility of internally generated software costs. (IV) We agree that depreciation associated with facilities used for qualifying research should be allowed as a part of the credit; however, certain distortions caused by the bill's change in the ACRS class for research equipment should be corrected. (V) We support increased and continued support of basic research at our universities. Further discussion of these comments follows.

I. The R&D Tax Credit

We are in favor of making the credit permanent. The legislative intent of enacting Section 44F was to stimulate research and experimentation activities in the United States. In recent decades, foreign competitors such as West Germany and Japan have devoted an increasing percentage of their GNP to R&D. As a result, product development in these countries, in many instances with considerable government assistance, has benefited from ever-increasing technological skill and innovation. It is imperative for reasons of economic progress and national security that U.S. companies increase their level of involvement in R&D. New technologies are essential to the strength of this nation's economy because many U.S. companies are engaged in direct competition with foreign entities in both domestic and international markets. Furthermore, because research is by nature a continuing and long term activity, it is important that the R&D credit be made permanent.

Research often results in benefits far beyond the initial intent. This is dramatically evident in our research at AT&T. Telephony evolved from research to help the deaf. The discovery and development of the transistor alone has brought about the most significant technological revolution in modern times: the onset of the information age. More recently, advances in lasers, fiber optics and solar cells have brought about whole new industries in themselves, and led to advances in other fields such as space technologies, agriculture, textiles, and medicine.

It is important that taxpayers plan an evolving R&D program. R&D is capital-intensive by nature and significant investment is required at the outset, with the knowledge that there may be no clear return. Thus, the permanent R&D credit is important, particularly in the case of basic research where it may be the only financial benefit (aside from current tax deduction) a company receives.

II. Activities That Qualify for the Credit

We agree with defining qualified research by law, as is done in the bill. By clearly delineating the two qualifying aspects of R&D, (a) planned search and critical investigation and (b) the application of that research towards the development of products and services, Congress is specifically defining those activities which it intends to qualify for the R&D credit.

Our main concern relates to items which are excluded from qualified research. Under Section 102 of the bill, once an item has been fully developed to the point at which it meets the specific functional and economic requirements of the taxpayer and is ready for commercial sale, any subsequent expenditures would generally be disallowed. According to the technical explanation, such costs would not be disallowed in the case where substantial redesign, testing and experimentation efforts may be required to make a product perform as originally specified.

We do not feel that post-production costs should be considered eligible expenditures only when substantial redesign may be required. Although an item may meet laboratory specifications, once it is placed in service, inherent problems with the item may become evident. Although the ultimate resolution of such problems may lie in a design change which, taken by itself is not "substantial", the process to reach the solution -- that is, to determine what the problem is -- may require considerable testing and/or experimentation. When the testing and/or experimentation costs involved are viewed as part of any redesign efforts, such costs, in total, may amount to a considerable sum. We therefore feel that the bill should clarify that the determination of whether the redesign is substantial should be based not only on the end result but also the costs of experimentation and testing incurred to reach that end result.

III. Limitation on Internally Generated Software

Although not specifically stated in the bill, the technical explanation indicated that the same criteria is to be applied to software developed for external use as to hardware. However, the bill does provide separate constraints on software developed for internal use of the taxpayer.

We see no reason for treating software developed for internal purposes in a different manner than any other research effort. If internal software qualifies as new or significantly improved, the qualified expenditures incurred in connection therewith should be eligible for the R&D credit. The criteria for the eligibility of software should be based on the nature of the product (i.e., is it innovative) and not be dependent on who the end-user will be. Additionally, the use of internal software aids a company in holding down its costs. Thus, efficiency is promoted thereby reducing the overall cost of the product and enabling a domestic company to compete more effectively in the international market place. The development of new and innovative products or services should be encouraged by the bill, whether they be software or hardware, and whether they be directly provided to customers or consumed by the taxpayer in its operations.

If the committee nevertheless decides not to eliminate the separate restrictions on internally generated software, at the very least, the statute should provide that software used by providers of service not be subject to the restrictions which will be applied to other internally generated software. As presently stated in the bill and technical explanation, the specification of the qualifying categories of internal applications appears to be biased in favor of manufacturers and providers of computer services and against providers of other services dependent upon software. For example, the bill might be interpreted as not allowing costs of developing software systems used to switch calls through a modern telephone network. Operation of the telephone network depends upon extensive, complex software systems. The cost of developing these systems, which are essential to providing services for sale, should constitute qualified research expenses.

In addition to the software that is involved directly in providing customer services, AT&T-Communications uses software systems specifically designed for planning, provisioning, monitoring and operating their network. The above types of software are innovative in their nature and require extensive experimentation. In order to put high technology service providers on a par with manufacturers, the software that is necessary for the provision of the services offered by these taxpayers should qualify for the R&D tax credit. The exception for internally generated software used in a production process (i.e., the second exception) should be clarified to provide that "production process" refers not only to the manufacture of tangible property, but also to the provision of services.

Finally, the bill currently delegates the responsibility to the Secretary for prescribing regulations with respect to internally developed software which will qualify as a business item. However, the bill provides no guidance as to the criteria which should be utilized by the Secretary in structuring the regulations. We feel the bill should contain guidance for the Secretary. Such guidance would serve to reduce the risk of controversy which may arise before regulations are issued and provide taxpayers with some direction during that interim period.

The criteria to be used should hinge on whether innovation and risk are requisite to the development of the particular software project. Additionally, risk should be based on a combination of economic, commercial and technological factors and not just mere physical capability. For example, commercial factors include the risks of obsolescence and the fact that the ultimate cost to develop the software may be too high in relation to its market value.

IV. The Eligibility of Depreciation for the R&D Credit

We are in favor of including depreciation as an eligible expense for purposes of computing the R&D credit because such inclusion would eliminate the artificial distinction between capital assets which are leased by the taxpayer as opposed to those which are owned. However, it appears that the rules with respect to the effective date (Section 105 of the Act) lead to irrational results when applied to base period computations.

Inasmuch as the bill would remove property placed in service after 12/31/83 from the three-year ACRS class, such property would probably be in the five-year ACRS class. However, the computation of the base period depreciation for 1984 and 1985 would include at least some similar equipment which is being depreciated over three years. Hence, the benefits of including depreciation as a qualified expense would be reduced and distorted. We recommend that the base period be recomputed using the ACRS lives as established under the proposed law for any equipment which was previously included in the three-year class.

V. Credit for University Basic Research

We agree with the increased amount and the continuation on a permanent basis of the tax credit for taxpayer support of university research. University research plays an important role in the welfare of the U.S. in general, and in the competitiveness of U.S. industry in particular. Such research is important, not only for its own sake, but also for the contribution it makes to the education of scientists and engineers. The provision of a tax credit based on incremental grants over a fixed base period should provide an excellent stimulus to support university research.

Very truly yours,

R. N. Flint

cc: Senator Bob Packwood
Chairman of the Subcommittee on Taxation and Debt Management

Senator John Chafee
Chairman of the Subcommittee on Savings, Pension and Investment Policy

Statement of
The Associated General Contractors of America
on the Topic of
Simplified Cost Recovery (S. 1758)
Presented to
Finance Subcommittee on
Taxation and Debt Management
February 24, 1984

SKILL RESPONSIBILITY INTEGRITY

AGC is:

- More than 32,000 firms including 8,500 of America's leading general contracting firms responsible for the employment of 3,400,000-plus employees;
- 112 chapters nationwide;
- More than 80% of America's contract construction of commercial buildings, highways, industrial and municipal-utilities facilities;
- Over $100 billion of construction volume annually.

The Associated General Contractors of America (AGC) represents more than 32,000 firms including 8,500 of America's leading general contracting firms which are responsible for the employment of more than 3,400,000 individuals. These member contractors perform more than 80 percent of America's contract construction of commercial buildings, highways, industrial and municipal-utilities facilities. AGC members also perform more than 50 percent of the contract construction done by American firms abroad.

AGC is pleased to be able to comment in support of the Accounting Cost Recovery Simplification Act of 1983 (S. 1758). The substitution of the open-ended accounting system of S. 1758 for the present asset-by-asset accounting system will provide all businesses a substantially simplified tax depreciation system. The Act improves the Accelerated Cost Recovery System (ACRS) by eliminating the asset-by-asset accounting system without changing the intended benefits of ACRS (i.e., rapid depreciation through audit-proof recovery periods. In addition, S. 1758 would provide needed administrative relief from the present basis adjustment calculations added to ACRS by the Tax Equity and Fiscal Responsibility Act of 1982.

Attached is AGC's technical analysis of each major provision of the bill. The combination of the different aspects of the bill described in the technical analysis would result in significant and beneficial administrative changes to our tax system without negative revenue effects to the U.S. Treasury. AGC urges the Subcommittee to act favorably on the bill and urges its prompt enactment into law.

AGC's Analysis of

Proposed Simplification of ACRS Rules

S-1758

Present

Property acquisitions are depreciated on an asset by asset basis.

Proposed

Property acquisitions after 1982 classified under ACRS rules as "3-year" and "5-year" property are placed in open ended accounts (recovery accounts). The depreciation calculation is based on the total recovery account balance as of the end of the tax year.

Present

Depreciation percentages on the ACRS table reflect 150%* declining balance with a switch to straight line, with one-half year's depreciation in the year of acquisition.

Proposed

Covered property is depreciated at a maximum rate equal to 150%* of the declining balance. The depreciation percentage does not reflect a switch to straight line. The half year convention is implemented by including one-half of the basis of assets in the recovery account during the acquisition year and one-half the following year.

Present

A taxpayer may now elect with respect to one or more classes of property acquired during a year to depreciate such on a straight line basis over an extended period of time.

Proposed

The taxpayer may elect to use any rate between (and including 150%* and 75%* to apply to a category for any year in determining depreciation. He may elect to classify any item of 3 year property as 5 year property and receive full (5 year) investment tax credit benefits.

* Represents percentage of straight line depreciation rate.

Present

Dispositions are accounted for on an item by item basis, gain or loss is reported based on the difference between any proceeds received and the adjusted basis (cost less accumulated depreciation) of the asset.

Proposed

Dispositions are recorded by reducing the recovery account by the proceeds from the disposition. Section 1231 gain is recognized to the extent a negative balance in the recovery account exceeds one half of the current year's additions. (The portion of additions included in the following year.) Any such reported gain will increase the recovery account.

Present

Upon the sale of 3 year or 5 year assets gain is ordinary to the extent of depreciation claimed.

Proposed

There is no depreciation recapture.

Present

The depreciable basis of assets acquired is reduced by 50% of the regular investment tax credit, energy credit and certified historic structures credit. As an alternative to the regular investment tax credit reduction, the amount of the credit claimed may be reduced by 2% .

Proposed

There is no basis reduction for credits claimed.

Present

Assets are subject to depreciation when they are placed in service.

Proposed

Progress expenditures treated as qualified for investment credit purposes are treated as property placed in service, and subject to depreciation, at the time the expenditure is made.

SENATE COMMITTEE ON FINANCE
DIRKSEN SENATE OFFICE BUILDING
WASHINGTON D.C. 20510

Comments Submitted By
Arthur Andersen & Co.
On Senate Bill S.2165

"High Technology Research and Scientific Education Act of 1983"

Introduction and Summary Comments

Presented below are specific comments concerning proposed legislation dealing with expanded incentives for research and development activities as contained in Senate Bill S.2165.

S.2165 proposes to make permanent the credit for increased research activities which was enacted by the Economic Recovery Tax Act of 1981 (P.L.97-34). We agree with this proposal since a permanent incentive, particularly an incremental one, is much more likely to accomplish the long range goal of increasing and continuing to increase research spending.

The bill also proposes to modify and narrow the definition of qualified research. We agree that the definition in the current law needs clarification but feel that the present proposal may be interpreted such that much bona fide research would be excluded and thus not encouraged by this incentive.

S.2165 also proposes to expand the scope of existing law dealing with deductions for contributions of scientific equipment to certain organizations and payments for basic research for purposes of the credit for increased research activities. Again, we agree with expanding these incentives in order to enhance the level of primary, secondary and higher education in the United States and to expand research activities and facilities in our colleges and universities. Specifically, with respect to scientific equipment contributions, the proposals should provide significant incentives to potential donors to contribute computers and other scientific equipment to our educational system in order to provide the opportunity for students and teachers to acquire and develop skills needed for the development and application of new technology. The present law regarding the credit for increased research activities through payments for basic research should be enhanced by the exclusion of incremental basic research from the base-period limitation, and the elimination of the prepaid contract research rules.

In general, the bill appears to contain the appropriate provisions to accomplish these goals. However, in a few instances which are dealt with below, certain modifications may enhance the encouraging intent of the proposed legislation.

I. Section 101 - Extension of The R&D Credit

The bill proposes to eliminate the sunset provision contained in Internal Revenue Code Section 44F and make the credit provided by that section (R&D Credit) permanent.

We believe that this proposal is appropriate, in fact, essential, to provide the incentive for long-term continued technological advancement of U.S. companies in relation to competitive advancements of companies in other nations. The purpose of a temporary tax incentive is to satisfy a short-term or temporary need. But, in general, it would not provide for a significant long-term effect. In order for the R&D Credit to encourage U.S. companies to adopt and pursue long-range research programs intended to result in the U.S. enhancing its position among the technologically advanced nations of the world, a permanent and significant incentive is necessary.

The present provisions which would cause the R&D Credit to expire in 1985 will provide some short-term assistance to encouraging research activities. However, the fact that the Credit will expire may cause some companies to choose to accelerate research projects which are flexible as to timing in order to take advantage of the R&D Credit. This type of action may give priority to a project which otherwise may have taken a backseat to another project which would have been of more significant long-range benefit. Furthermore, most companies budget their research efforts several years in advance, and allocate funding to various projects based upon a number of complicated factors, including net out-of-pocket cost to the company. The economics of this budgeting process make it very difficult for a temporary incentive to have its full impact on resource allocation decisions. Where the R&D Credit is a permanent incentive, not only would these types of problems be eliminated but the incremental nature of the incentive would provide continued encouragement to constantly expand research activities.

II. Section 102 - Modification of the Definition of Qualified Research for Credit Purposes

The bill proposes to narrow the definition of qualifying research and development expenditures by imposing experimentation and functional improvement requirements on qualified research.

A. Legislative intent: Encouraging innovation

In his comments on the bill, Senator Danforth makes some illuminating points about the intended purpose of the law. He indicates that the U.S. "preeminence in commerce, science and technological innovations" is being clearly threatened in the world marketplace and that the bill is designed to help American industry meet that challenge. This is language similar to that used by Congress in discussing the Credit under ERTA. Senator Danforth focuses on the high technology industries' needs in his comments. This industry is probably one of the most vivid examples of concentrated leading edge technology in the American business sector. However, the R&D Credit is aimed at enhancing the productivity of the entire American commercial sector, not just high technology industries, since it allows credit for qualifying research in all types of businesses.

We feel that this is especially appropriate particularly in light of the fact that U.S. industry is under increasing competitive pressure in foreign as well as domestic markets. Today, an American company's most serious competitor for sales dollars may no longer be its domestic neighbor. Instead, as foreign governments increasingly subsidize their industries' research and development efforts, American companies find that although maintaining their technological edge is essential, competing with foreign government subsidies makes maintaining that edge ever more difficult. The proposed credit modifications, if enacted and supported by appropriate legislative history, would go a long way towards ensuring that American business can continue its leadership role in world commerce.

B. "State-of-the-art" innovation not essential

We were pleased to see that the bill was written so that the R&D Credit will have widespread application, since productivity enhancing research can clearly take place in non-high technology industries.

For example, consider a steel manufacturer that experiments with, and eventually develops, a new type of furnace that enables the company to process steel much more economically and therefore enables the company to sell its product on a more competitive basis in the world marketplace. Although the technology involved in the new furnace may not be "state-of-the-art" in the industry, if it brings this company out of the "dark ages" of steel production and if the development effort involved the true experimentation required by proposed section 44F(d)(3), there seems to be every policy reason to encourage that type of development effort with the R&D Credit. Indeed, the law as proposed would seem to clearly allow R&D Credit in this case.

We feel that this result is an important one, because it will encourage America's "smokestack" industries to upgrade their processes and use current technology. This cannot but enhance overall productivity. The law as proposed recognizes that important "middle ground" between mere copying and "state of the art", where a large amount of truly important productivity enhancements can be stimulated. This is certainly more appropriate than a "new to the world" standard that would be difficult to predict and administer and much less of an incentive.

C. Computer Software - In-house

The bill's section 102 modifies IRC Section 44F(d)(4) by adding software as a "business item" but specifically excluding from the definition of "business item", software developed by the taxpayer solely for internal use ("in-house software"), except as allowed by Treasury regulations for "truly innovative" software. This provision thereby establishes a different and more stringent standard for in-house software.

We submit that this portion of the bill merits additional thought. As Senator Danforth points out in his comments, American high technology companies are on the cutting edge of the world's commercial innovation. One of the most important contributions of American ingenuity to the world's business community has been the introduction and use of computers in practically every aspect of modern industry. With the advent of the microcomputer, business use of computer related tools has literally exploded.

1. Productivity is the key

This increasing use of computer assisted tools in industry is manifesting itself through a wide range of positive, productivity enhancing applications. Complex design processes can now be computer modeled and pursued with an efficiency and accuracy never before imagined. Multiple steps in production processes can be controlled and monitored with the utmost precision. Perhaps most importantly, the computer now has given the American business manager the ability to accumulate, manipulate and analyse data concerning his or her business so that informed decisions can be made about efficient and productive allocation of company resources. By taking full advantage of the computer, American business can keep pace with the constantly changing business world and react quickly and efficiently to those changes. We submit that it is sound policy to encourage development of such computer applications in American business, especially when considering legislation aimed at encouraging U.S. productivity enhancements and American high technology innovation.

The computer is essentially just a versatile machine and encouraging business to develop new and improved ways to use that machine is a sound policy objective. Since software is essentially instructions to that machine, it is also sound policy to give credit incentive to businesses that develop programs that instruct computers to perform new tasks or to perform old tasks in a significantly improved manner.

The proposed legislation makes great strides in this respect by attempting to make it clear that most software development efforts are entitled to be tested against the same standards as other product development. Thus, under the proposed legislation, it seems clear that development of a robot to perform a new production task would qualify for Credit (assuming the development effort met the experimentation and significant improvement tests in proposed section 44F(d)(3)). Similarly, development of the software to drive that robot would also qualify, as presumably would subsequently developed software causing the robot to perform its tasks more efficiently or perform new tasks.

However, the legislation proposes to severely restrict the availability of credit to internally developed, presumably management-type, software. We do not agree with this approach. We believe that internally developed software should be encouraged on a par with all software efforts, indeed for all product development efforts, for a number of important policy reasons. First, the ability of American industry to be productive and efficient in today's economy is to a large extent dependent on the efficiency of its management and the data it has available to it. This is especially true in high technology industries where creative, "idea people" may start a company with little or no management know-how. It is also true in existing industry, where the ability to manage growing operations is dependent upon management's information gathering and analyses with respect to those operations. By encouraging the development of in-house software, including internal management software, American business would be encouraged to seek out new and improved ways of managing productivity. We feel that this, in and of itself, is ample reason to allow such internal software development efforts to qualify for credit.

The second important reason to encourage in-house software is even more fundamental and far reaching. If American business is encouraged to find new and better uses for computer assisted technology in day-to-day management and other internal operations, this will amplify the economy's fundamental need for more and better high technology hardware. Naturally, this would create an additional, non-tax funded, economic motive for the high technology producers of these products to do more research and develop even better machines. Allowing in-house software to qualify for credit on the same basis as other product and software development would encourage American business to develop ways of using this versatile machine - the computer - to its fullest advantage, therebye maximizing American business's chances to remain a leader in world commerce.

2. Concern Over Routine Programming

One of the concerns about in-house software is that too many routine programming efforts would come within the technical definition of research and development, therebye thwarting the intent of the law. Of concern also is the possibility that internal efforts to develop software may be only marginally efficient and that allowing credit for such efforts would artifically enhance the economics of such projects. Although these may be valid concerns under the definition of research in the present law, we feel that the proposed legislation effectively deals with those concerns without the need for a separate standard for in-house software.

By applying the same tests to in-house software as are applied to all product development, routine and non-experimental programming efforts would be excluded from Credit under the new statutory definition of "new or significantly improved". Furthermore, unless the software is designed to be a functional improvement (the proposed law refers to this as improvement of such things as "function, performance, reliability, quality or cost...") over what the taxpayer currently has, or is otherwise readily available, it will not qualify. This test would properly exclude from credit, for example, the development of internal accounting software that simply mirrored the taxpayer's existing manual system with no significant change in the system's overall function, reliability, performance, or cost to operate. However, software that is truly a measurably significant improvement over a manual system should qualify for credit, since it by definition has allowed the business to enhance its own productivity and therefore increase its ability to be a contributing force in the economy.

In addition, the proposed legislation's experimentation requirement is an additional safeguard against software abuses, as it would eliminate from credit qualification "mere replications" of other software products currently on the market.

Part of the Treasury's analysis supporting the proposed regulations under the existing section 174 has been that in-house software should not qualify for credit because it is not research. Treasury has stated that the creation of or improvements to a manual accounting system would not qualify as research. Accordingly, Treasury reasons that the development of software to perform the accounting should not qualify for credit.

We feel that this analysis is incorrect. A more appropriate analogy would be to compare software development of management assistance systems with the development of a machine - a computer - to perform those same tasks. The fact that the software product enhances productivity is without question. The fact that the costs to develop a machine to accomplish these objectives would qualify is clear (assuming that it met the experimentation and functional requirements of proposed section 44F(d)(3)). If software can be developed by a taxpayer to also yield these results, there is every reason to allow that software to also qualify. The simple fact of the matter is that software development - including internally developed in-house software - can enhance productivity by providing a means by which machines can help American business perform human tasks faster and more accurately. Accordingly, the development of software by a trial and error process that is functionally new or improved and which demonstrably enhances productivity should satisfy the objectives of the R&D Credit and thus qualify for that benefit.

An example helps illustrate this point: It would seem clear that the development of a computer-driven machine to replace human accounting personnel would qualify for the R&D Credit. In addition, software developed for this machine (and not necessarily by the manufacturer of the machine) to enable it to accomplish those tasks should qualify for the R&D Credit, even though the software involved no new or novel programming techniques, so long as the development effort meets the tests in proposed section 44F(d)(3). The true key to qualification for both the machine and the software that drives or enhances it is that they are new or significantly improved over what the taxpayer had available prior to the effort. However, if that same software was developed by a taxpayer's own employees for the taxpayer's internal use, the separate standard in the proposed law precludes the effort from qualification unless it meets more stringent and perhaps almost impossible criteria to be provided for by regulation.

We believe that any separate standard in the legislation for in-house software will improperly exclude many truely important software development efforts because many in-house software efforts, although worthy of encouragement, may not be "truly innovative" (the test referred to by Senator Danforth in his comments), depending upon how this standard would be defined. We further believe that the new definition of research, as outlined in the proposed law, would adequately target only intended and appropriate in-house software efforts for the R&D Credit without the necessity of the proposed special rule for those projects.

The effectiveness of the new general definition of research - without the separate standard for internal software - can be demonstrated with respect to software by the following examples:

> 1) X, a manufacturing company, undertakes to computerize its manual inventory accounting system. The company feels that computerization will be cost effective in the long run, but realizes that it must develop its own system internally, because the peculiarities of its inventory system do not lend themselves to any commercially available programs. X employs programmers who interview accounting employees and who write a program that automates the manual steps the accounting personnel perform. The resulting system is marginally more accurate than the manual system. The output from the system is essentially no different and no more timely or informative than the manual system.
>
> This software effort would not qualify under the proposed definition of research, because the effort did not result in a process that is significantly improved over the taxpayer's manual system. This result is consistent with

the policy behind the proposed law, since the effort has resulted in no measurable enhancment to the productivity of the business. Note that this result would still occur, even if the development effort involved experimentation within the meaning of proposed section 44F(d)(3), because of the two part test that any development effort must pass before it can qualify for credit.

2) R, a manufacturing company, undertakes to expand its present computerized accounting system to include an inventory control system. The company presently uses manually compiled, monthly inventory figures in a manual statistical model which projects materials usage and appropriate purchase requirements for the upcoming month. The company has found that this manual inventory system is insufficient in that the company cannot effectively respond to trends and changes in its production process or in the marketplace.

The company undertakes to develop a system that will track inventory quantities and their use by the production process. After careful study and evaluation, the company determines that it should develop an information retrieval system that has its beginnings in the raw materials storage areas and which tracks both usage and spoilage throughout the production process. The system will also monitor orders, order changes, inventory levels and production. It will trigger notices and analyses to management that will provide immediate feedback on important trends and changes in the business.

X's programmers and systems designers spend a great deal of time and effort in developing a system to accomplish these objectives. They evaluate multiple alternatives, since they have not only hardware capacity and compatibility in mind, but also a multitude of practical, user-oriented options from which to choose, some of which are determined to be inefficient or impractical. The resulting system is designed to significantly improve the company's ability to produce its product more efficiently and reduce its operating costs by minimizing inventory levels and responding to the marketplace more rapidly. Nothing similar is available on the marketplace and the company does not merely alter a commerically available program to obtain its goal.

Under the overall goals in the proposed law, this project should, but may not, qualify for credit. We feel that the effort should qualify because it meets the experimentation and significant improvement requirements. This software significantly improves the efficiency with which the company can manage its inventory and production and therefore enhances the company's ability to compete in the

> marketplace. The mere fact that the software is a management tool as opposed to a research or production tool does not mitigate its productivity enhancing qualities, and it should not make it less eligible for the R&D Credit. Based upon the general criteria in the law (without considering the special internal software rule), this effort would and should qualify for credit. There is no need for the law to specifically discriminate against in-house software.

The above two examples illustrate that the proposed statute's general provisions are adequate protection against abuses in the in-house software area. They also show that the provisions, if allowed to be applied to all software efforts, could encourage important productivity enhancements in accordance with sound policy objectives.

We feel that excluding internally developed software from qualification from the R&D Credit would improperly exclude many potentially significant software projects that American business should be encouraged to undertake, consistent with the overall philosophy of the R&D Credit legislation. The legislation as currently proposed already includes adequate safeguards against routine software development, without the need for a special provision for in-house software. We recommend that deletion of this special provision be considered.

III. Section 103 - Inclusion of Equipment Depreciation as a Qualified Research Expense for Credit Purposes: Elimination of Special ACRS R&D Equipment Category

Proposed Section 103 would amend Section 44F(b)(2) to add to qualified expenses depreciation on tangible personal property used in the conduct of qualified research.

We believe that this addition makes sense in at least two respects. The present law allows payments for the right to use personal property (rent) as qualified expenditures. It does not make sense that a company which chooses to purchase research equipment rather than rent it be given less favorable treatment under the R&D Credit provisions. In addition, in many cases the research equipment is, by definition, state-of-the-art machinery which is very expensive and the acquisition of such equipment represents a major capital outlay to the taxpayer. Allowing the Credit on the depreciation of such equipment will help to defray the cost to the taxpayer and, perhaps, encourage the company to acquire the best equipment available rather than compromise itself and purchase inferior equipment because of budgetary constraints. Presumably, the better the R&D equipment the better the R&D effort and results.

IV. Section 104 - Availability of the R&D Credit to Corporations and Partnerships and Other Joint Research Ventures

A. Section 104 proposes to eliminate the "carrying on a trade or business" requirement for all regular corporations.

This is a major step forward from the present law. A large portion of technological innovation in the U.S. emanates from start-up and emerging companies which under present law may not be eligible for the R&D Credit. This is ironic because in all likelihood it is these companies that need the most assistance from the tax law since they are typically in dire need of working capital and R&D financing. It is in these fledgling companies that there is frequently a wealth of creativity but a distinct lack of financial resources. The availability of the R&D Credit for these companies would assist in providing this much needed financing.

B. Section 104 also proposes that the R&D Credit be made available to partnerships only where the partnership is carrying on a trade or business. This proposal, consistent with the present law, would deny the R&D Credit to start-up companies who choose to operate as partnerships and R&D partnerships which raise funding for contract research. The expressed intent of these limitations is to make the R&D Credit unavailable to "tax shelters". Although the policy underlying this expressed intent may be appropriate, the manner in which it is implemented denies the Credit to true start-up companies doing their own research where they choose to operate in partnership form.

It also denies the Credit to R&D partnerships which conceivably could represent a larger source of R&D funding than companies themselves which are actively carrying on trades or businesses. The R&D partnership has been a somewhat successful vehicle in raising funds for research by both start-up and long established companies. Based on their popularity to date, it would appear that these vehicles have access to investors who are willing and even excited about participating in technological development and its fruits. However, because of the uncertainties of investing in research and the limited return available to them, many smaller potential investors are afraid to commit their savings to R&D. Making the R&D Credit available to bona fide R&D partnerships as opposed to those partnerships totally driven by leveraged tax deductions could help this large potential investor pool overcome its fears and invest much more money in R&D projects. We believe it is possible that rules can be written to distinguish between these bona fide R&D partnerships and "Tax Shelters" and set forth conditions for eligibility for the Credit for the former.

C. In the rules dealing with "Certain Joint Ventures" in Section 104 of the bill in the last paragraph of proposed Section 44F(f)(3)(B), the Credit utilization limitation for individuals is waived in certain circumstances.

It would appear that the intent of this waiver is to ignore any limitations imposed by virtue of the taxable income or loss of the joint venture itself but rather to flow the qualified expenditures into the partner's other business activities and consider the utilization limitation at that second level. However, the provision waiving the limitation can be literally read to waive the limitation entirely where a special joint venture is involved at all. The last sentence of the paragraph referred to above provides that ". . . the limitation under subparagraph g(1)(B) on the amount of the credit available under this section shall be inapplicable." The word "section" in this sentence could be interpreted to mean

Section 44F. Perhaps changing "section" to "subparagraph" would clarify this situation.

In addition, we feel that if the Credit is made available to legitimate R&D partnerships, the utilization limit should be waived entirely. This would give a true incentive for investment in risky research which incentive does not otherwise exist in the present law.

V. Section 201 - Expansion of the R&D Credit for University Basic Research

With respect to this section of the bill we submit the following comments:

A. Proposed section 44F(e)(1) has language which makes it clear that the prepaid rule contained in existing section 44F(b)(3)(D) will not be applicable to payments for basic research.

This modification should enhance the basic research provisions in two ways. It will eliminate the necessity of potential donors determining the amount of funding a donee would plan to spend in a given year for purposes of determining the amount of the donor's payment. Secondly, it will eliminate a potentially difficult recordkeeping and reporting problem for the donee to account to the donor on the amount of a specific contribution spent in a given taxable year. This would be particularly onerous where the donor and the donee had different yearends.

B. Proposed Section 44F(e)(5) excludes small business corporations and service organizations from eligibility for the basic research provisions.

Considering the fact that the objective of this portion of the proposed legislation is to generate funding to expand research capabilities and facilities, we feel that these exclusions should be eliminated to broaden the universe of potential donors. Further, we feel that the definition of eligible donors should be expanded to include partnerships and other unincorporated entities which are actively engaged in a trade or business, as this would expand the universe even further.

VI. Section 202 - Deduction for Contributions of Scientific and Technical Property for Use in Scientific Education

A. Section 174A(c)(1) defines qualified contributions as property donated for use in research, education, and research training.

Expanding the scope of property contributions to include contributions for education as well as research should assist in filling a serious void in the available work force in the U.S. One of the most significant problems facing high technology companies is the lack of adequately trained engineers and technicians. The legislation provides incentive for the business community and the academic community to join forces in not only upgrading research capabilities but upgrading educational programs to provide students and teachers with the skills necessary to overcome the problem of a significant lack of qualified personnel in our high-tech industries.

B. Subparagraph (F) of Section 174A(c)(1) mandates that donated property be kept by the recipient for 5 years.

From a policy point of view, it is counterproductive to require recipients to retain for long periods of time equipment that could rapidly become obsolete. Perhaps three years would be a time period which would satisfy all of the objectives.

By the same token, schools should not be allowed to use donated equipment to raise cash which would not be used to replace the sold property. However, schools should be allowed to upgrade their equipment by trading it for newer models. Therefore, we feel that the law should contain a provision that would allow recipients to at least "trade-up" existing machines, that may be obsolete, for more advanced versions. Such a change would certainly be consistent with the expressed policy.

C. Section 174A(d)(1) specifies that in the case of computer software, the deduction is equal to the fair market value of the property, limited to the lesser of (1) the taxpayer's basis in the property plus one-half the ordinary gain if sold or, (2) twice the basis in the property.

In the case of developed computer software, this limit would result in little or no tax deduction since, in most cases, the taxpayer would have little or no basis in the software as the costs would have been expensed as incurred. This seems to make the provision moot and thus provide little or no incentive to contribute developed software.

We would agree that incentive should be provided to contribute software. We recommend that there be no basis limitation for software, but that a fair market value ceiling be imposed on the deduction.

D. Section 174A(3) provides a limitation on the deduction for qualified services to the lesser of normal charges or 150 percent of the "direct cost" of providing the services. The term "direct costs" should be defined.

E. Section 174A(f)(2) excludes an electing small business corporation from the definition of the term "corporation."

Perhaps it is a policy issue as to whether deductions such as those provided by proposed section 174A not be allowed to individuals, even in a flow-through environment. However, as a result of the Subchapter S Revision Act of 1982 (P.L.97-354), many corporations including computer and computer equipment manufacturers, scientific equipment manufacturers, and software developers can and will avail themselves of the small business corporation provisions as defined in section 1371(b). Accordingly, in order to provide the same incentives to those companies as to regular corporations to support educational institutions through contributions of computer and scientific equipment and computer software, consideration should be given to allowing small business corporations to be eligible for purposes of proposed section 174A.

F. Section 174A(f)(2) specifies that a deduction will not be allowed in connection with transfers of qualified computer equipment or qualified scientific property where such transfers exceed, on a product by product basis, 20% of the number of units of such product sold by the taxpayer in the ordinary course of its business in that taxable year.

This provision would limit the deduction in the initial year of the introduction of a new product where this condition is not met because the taxpayer made large donations but had relatively low sales in the product's first year. Perhaps further consideration should be given to this situation and allow for an exception to the rule where the taxpayer can demonstrate the product is new and viable as an active component of its product line.

SUBCOMMITTEE ON TAXATION
COMMITTEE ON FINANCE
UNITED STATES SENATE

HEARINGS ON S. 1857
NOVEMBER 17, 1983

STATEMENT FILED BY THE CLARA ABBOTT FOUNDATION

S. 1857 is entitled a bill "to remove certain impediments to the effective philanthropy of private foundations". The Clara Abbott Foundation would like to take advantage of the opportunity offered by these hearings to bring to the Subcommittee's attention an Internal Revenue Service-created "impediment" to effective philanthropy of many private foundations which S. 1857, as drafted, does not presently remove. However, the Subcommittee may want to consider amending S. 1857 to remove this "impediment", too.

The impediments in this instance are certain guidelines, in the form of Revenue Procedures, issued by the Internal Revenue Service which have forced our Foundation and other foundations similarly situated drastically to reduce our scholarship and educational loan programs at the very time when educational costs are rising and President Reagan has called for increased voluntarism and private-sector initiatives in these areas to take the place of reduced Federal spending. We want to respond to the President's call and to the increased needs of our student applicants but we are prevented from doing so by the Service's Revenue Procedures.

First, some background information about The Clara Abbott Foundation. The Foundation was formed in 1940 pursuant to a bequest in the Will of Clara Abbott, the widow of the founder of Abbott Laboratories, the Illinois-based world healthcare company. The Will mandated the use of the bequest for the benefit of active and former employees of Abbott Laboratories and their dependents. This bequest, and earnings from it, now comprise the principal assets of the Foundation. Contributions from other individuals have been received from time to time, but Abbott Laboratories has made no contributions to the Foundation. This is very unusual for a company-related private foundation. Most such foundations are funded in whole or in substantial part by tax-deductible contributions from the corporations which formed them. The fact that The Clara Abbott Foundation is different -- that it has never received funds from Abbott Laboratories -- is significant to this statement.

Since 1945 the Directors of the Foundation have used a significant portion of the annual Foundation income for the purpose of granting college scholarship and educational loans to children of active and former Abbott employees who could demonstrate the requisite financial need and academic promise in furthering their education. Since the inception of the program, the Foundation has made aggregate scholarship grants in excess of a total of $4 million and aggregate educational loans of in excess of a total of $1 million.

Once a scholarship or loan has been granted, it is generally renewed for the remaining academic years if the student continues to meet the academic requirements of the college or university and continues to demonstrate the requisite financial need.

The Program has always been administered to favor the children of lower paid employees, i.e., those who might not be able to attend college without some financial assistance. For example, for the academic year 1982-1983, the combined annual income of the parents of a student receiving a Foundation scholarship or loan averaged $26,061. It has also been the philosophy of the Foundation to encourage self-help and to provide assistance to as many students as its limited available funds would permit. Under this philosophy the Foundation makes numerous grants, each of which is of modest size and is substantially less in most instances than the aggregate amount needed to defray tuition, room, and board. Thus, during the last full academic year, the average annual scholarship for a beginning student was $671 and the average educational loan in the Foundation's reduced loan program was $2,680. In addition, no students may receive both a scholarship and a loan; they receive one or the other. In this way the Foundation is able to give some aid to a larger number of students requiring financial help to further their education.

Attached to this statement is a table which summarizes the scholarships and educational loans made to beginning students by the Foundation for the academic years 1976-1983.

From this table it can be seen that the Foundation has made no educational loans to beginning students during the past two academic years. This is not because the needs of its student applicants have decreased. Quite the opposite is true. The Foundation has been forced to discontinue its student loan program to remain in compliance with the IRS guidelines, a result which is highly undesirable from the Foundation's point of view and, it is submitted, undesirable as a matter of public policy.

In 1976 the Internal Revenue Service issued Revenue Procedure 76-47, which set forth guidelines to determine whether scholarship grants made by a private foundation under an employer related program to employees or children of employees are taxable expenditures under section 4945 of the Internal Revenue Code. The avowed purpose of these guidelines was to assure that scholarships were granted on an objective and nondiscriminatory basis and were not a form of disguised compensation to the employee. Most of the requirements in these guidelines were reasonable and were already part of the Foundation's policies. For instance, under the Procedure, grants must be made by an independent selection committee and must be based solely on objective standards, such as need and academic performance.

Only one requirement has caused the Foundation concern from the outset. This is the so-called percentage test in section 4.08 of Rev. Proc. 76-47. It sets a maximum limit on the number of scholarships which the Foundation may grant to beginning students in any year. To meet the percentage test, the number of students receiving scholarships may not exceed, alternatively, 25% of the students who applied or 10% of the students who were eligible to apply. In other words, the Foundation is required by the Internal Revenue Service to turn down three out of four scholarship applicants, irrespective of their financial need, or alternatively to limit its awards to only one in ten of those who may have been eligible to apply. This is a severe and strange test -- requiring a charity to do less than that for which it is financially capable, to prove its good faith to the government.

The Foundation applied for administrative relief from the percentage test to the Internal Revenue Service on the basis that the absence of company contributions in the Foundation made it less likely, if not impossible, that disguised compensation could be present. However, no relief was afforded.

The Foundation's problems were significantly compounded in 1980 when Rev. Proc. 80-39 was issued by the IRS, extending the same rules to educational loans and taking the startling position that scholarships and loans must be treated the same and must be aggregated for purposes of meeting the percentage tests. This meant that if the Foundation was to continue its scholarship program at comparable levels, it was forced to sacrifice the loan program. Thus, to comply with Rev. Proc. 80-39, beginning in the Fall of 1981, the Foundation loan program for beginning students was eliminated. Since then the Foundation has given loans only on renewal applications to prior loan recipients. In the year 1984, unless the rules are changed, the loan program will be entirely extinct.

In addition, the scholarship program has also been significantly curtailed. In the spring of 1983, the Foundation's Directors increased the budget for the scholarship and loan program. Based on an initial review of applications, the Selection Committee would have granted 381 beginning scholarships for the academic year 1983-84. However, the IRS mandated percentage tests required the elimination of 60 scholarships that would have otherwise been granted.

These results are highly unfortunate. The Foundation believes that the Federal government should encourage, or at least remain neutral toward private programs which assist students in financing their college education. It is particularly troublesome that these rules are being applied at a time when the Federal government is substantially reducing its educational loan program and looking to the private sector to do more, not less, in responding to the financial needs of college students.

Since the publication of Rev. Proc. 80-39, the Foundation again applied to the IRS for administrative relief from the application of the percentage tests, asking at a minimum that separate percentage tests apply to its scholarship and educational loan programs. The Foundation was informed last Spring that it has again been denied any relief. Thus, the Foundation has exhausted its administrative remedies.

The Foundation believes the percentage test limitations in Rev. Proc. 76-47 and Rev. Proc. 80-39 constitute an unreasonable use of administrative discretion and have the effect of distorting and undermining the purposes of section 4945 of the Code.

We urge that the Subcommittee recommend to the Committee on Finance that S. 1857 be amended to remove the impediment to effective philanthropy imposed by the percentage test limitations in Rev. Proc. 76-47 and Rev. Proc. 80-39. The Foundation has attached to this statement some proposed statutory language to accomplish this purpose. The proposed amendment would retain the substantive requirement under section 4945 that scholarships and educational loans -- in order to avoid being treated as taxable expenditures -- must be awarded on an objective and nondiscriminatory basis. However, the amendment eliminates the requirement that a private foundation must obtain advance Internal Revenue Service approval of its grant-making procedures to accomplish this purpose. Accordingly, the amendment puts into the statute some of the requirements now contained in the Regulations. The amendment also makes special reference to employer-related grant programs in the statute and directs that scholarships and educational loans awarded under such programs must meet the requirements provided in Regulations. It is assumed that such Regulations would include many or all of the tests presently required under Rev. Proc. 76-47 and Rev. Proc. 80-39 other than the percentage tests and that the report of the Committee on Finance with respect to this amendment would make it clear that the inclusion of any similar percentage tests or limitations in such Regulations would be inappropriate and in violation of the legislative intent in enacting the amendment.

If for any reason the Subcommittee should consider it inappropriate to add the proposed amendment to S. 1857, the Foundation urges that the Subcommittee at a minimum consider including in any report on the bill a direction to the Internal Revenue Service that it reconsider its position with respect to the percentage limitations in Rev. Proc. 76-47 and Rev. Proc. 80-39 and attempt to eliminate such limitations altogether or revise them so that they will not constitute the present impediment to effective philanthropy.

Thank you for the opportunity to express these views in connection with your consideration of S. 1857. The Foundation hopes that the Subcommittee, by adopting the proposed amendment, will permit it and other private foundations to regain the freedom and flexibility to respond to the growing financial needs of student applicants who are trying to further their education and are in need of scholarships and educational loans.

THE CLARA ABBOTT FOUNDATION

The following tables summarize the scholarships and loans made by the Foundation to beginning students for the academic years 1976-1983:

Scholarship Program

Academic Year	Number of Scholarships	Aggregate Scholarship Dollars	Average Scholarship Amount
1976-77	186	$ 82,950	$ 445
1977-78	125	51,250	410
1978-79	183	94,950	519
1979-80	281	157,100	559
1980-81	343	208,250	607
1981-82	383	297,575	777
1982-83	443	297,103	671

Loan Program

Academic Year	Number of Educational Loans	Aggregate Loan Dollars	Average Loan Amount
1976-77	23	$ 40,605	$1,765
1977-78	48	88,750	1,849
1978-79	37	76,590	2,070
1979-80	45	95,500	2,122
1980-81	100	199,885	1,998
1981-82	0	0	0
1982-83	0	0	0

PROPOSED AMENDMENT TO S. 1857

1. Redesignate subsection (e) of Section 2 of the bill as subsection (f) and add a new subsection (e) to read as follows:

(e) SCHOLARSHIPS AND OTHER INDIVIDUAL GRANTS -- Subsection (g) of section 4945 of the Internal Revenue Code of 1954 (individual grants which do not constitute taxable expenditures) is amended to read as follows:

(g) INDIVIDUAL GRANTS -- Subsection (d)(3) shall not apply to an individual grant awarded on an objective and nondiscriminatory basis and

(1) the grant constitutes a scholarship or fellowship grant which is subject to the provisions of section 117(a) or an educational loan and

(A) is to be used for study at an educational organization described in section 170(b)(1)(A)(ii),

(B) is granted pursuant to a procedure reasonably calculated to result in performance by grantees of the activities that the grants are intended to finance and under which the granting foundation obtains reports to determine whether the grantees have performed such activities, and

(C) in the case of grants under an employer-related grant program to an employee or to a child of an employee of the particular employer to which the program relates, is granted pursuant to a program which meets the requirements provided in regulations prescribed by the Secretary to insure that the primary purpose of the program is to educate grant recipients in their individual capacities and not to further the private interests of the employer,

(2) the grant constitutes a prize or award which is subject to the provisons of section 74(b), if the recipient of such prize or award is selected from the general public, or

(3) the purpose of the grant is to achieve a specific objective, produce a report or other similar product, or improve or enhance a literary, artistic, musical, scientific, teaching, or other similar capacity, skill, or talent of the grantee.

2. Subsection (2) of redesignated subsection (f) (Effective Dates. --) is amended to read as follows:

(2) The amendments made by subsections (b), (c) and (e) shall apply to grants made after December 31, 1982.

CONSORTIUM of SOCIAL SCIENCE ASSOCIATIONS
1755 MASSACHUSETTS AVENUE, N.W., SUITE 300, WASHINGTON, D.C. 20036 • [202] 234-5703

February 24, 1984

The Honorable Robert Dole, Chairman
Senate Finance Committee
Attn: Roderick DeArment
219 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Dole:

I am writing to request that the enclosed statement be inserted into the record of the hearings on the "High Technology and Scientific Education Act of 1983" (S.2165).

The exclusion of the social sciences from the provisions of the legislation limits its effectiveness. Social science research has and can make contributions to generate high technology industrial products and increase productivity. Including social science research in tax incentives for industrial research and development, university based research, donations of equipment to universities, and the encouragement of students to study science will work toward meeting the goals of promoting economic growth for this country.

Thank you for your time and attention.

Sincerely,

Roberta Balstad Miller
Executive Director

RBM/sdq

American Anthropological Association • American Economic Association • American Historical Association • American Political Science Association
American Psychological Association • American Sociological Association • American Statistical Association
Association of American Geographers • Association of American Law Schools • Linguistic Society of America

HIGH TECHNOLOGY RESEARCH AND SCIENTIFIC EDUCATION ACT OF 1983

The "High Technology Research and Scientific Education Act of 1983" (S. 2165), which is being considered by the Senate Finance Committee, seeks to make permanent the changes to the Internal Revenue Code concerning tax credits for research and development (R&D) enacted in the Economic Recovery Act of 1981.

The Consortium of Social Science Associations (COSSA), which represents 175,000 social and behavioral scientists, is disturbed by four features of S. 2165: 1) the exclusion of the social sciences from the research and development (R&D) tax credit; 2) the exclusion of social science research from qualifying for the credit for university basic research; 3) the exclusion of the social sciences from qualifying for the use of donated scientific and technical property; and 4) the exclusion of social science graduate students from the provision exempting scholarships, fellowships, grants and loan forgiveness from gross income. We would like to discuss each of these.

1) The exclusion of the social sciences from the R&D tax credit limits the effectiveness of the legislation. Congress has expressed its desire that the United States help industrial research and development generate new high technology industrial products to promote economic growth in this country. One means of doing so is the tax credit for new R&D in the Economic Recovery Tax Act of 1981. However, the process of creating and employing new technologies is not merely mechanistic; it is also an inherently social process that depends heavily on human factors as well as machines. The development of new technologies is a product of both human and physical components. Social science research informs us about these human factors.

There are many examples of the impact of social science research on improved productivity and better products. Human factors research in aviation and power plant design have contributed to improved design and placement of gauges and controls for maximum readability and efficiency of control. These are critical elements because many lives and millions of dollars in equipment depend upon rapid and accurate human judgment and performance. For example, cockpit design problems in the F-18 fighter aircraft were corrected on the basis of the findings of social science research. In addition, social science experiments on worker productivity and quality control have led to effective techniques, utilized extensively by the Japanese, for linking participative decision-making and the acceptance of innovations in the workplace.

Social science research is critical in the development of several major high technology areas such as robotics, where social scientists study human factors in the design and operation of industrial robots and the impact of robotics on worker morale and productivity, on unemployment, and on labor market dislocations. Another area where social scientists play a vital role is in the research on artificial intelligence in the deveopment of supercomputers. Social scientists also contribute to the assessment of long-term risks associated with new technologies and to understanding the most efficient and productive environments for technological innovation. Finally, it is clear that the future use of new technological products will be as constrained by workers' skills, mobility, and adaptability -- all studied by social scientists -- as by the availability of investment capital and technological quick-fixes.

Einar Thorsrud, Director of the Work Research Institute of Norway, testified at hearings held by the House Subcommittee on Science, Research and Technology that the stimulation of new technologies requires "problem oriented research," where scientists are drawn together irrespective of discipline in "concrete collaboration...each bringing their contributions to solve complex problems." This collaboration can not be achieved without expanding the industrial research and development tax credit to include research done by social scientists.

2) S. 2165 creates a new tax credit for a corporation's payments to universities and other qualified non-profit tax-exempt organizations for basic research. Once again, the social sciences are excluded from the definition of university basic research used in this section of S. 2165. Excluding contracted social science research from this tax credit limits the effectiveness of the legislation still further. It precludes industry from using the tax credit to take advantage of the contributions university social science research can make to the economic growth of the country.

3) The Congress has made clear its desire to help institutions of higher education modernize their equipment and facilities for training the country's new scientists and has provided for a tax credit for the donation of scientific equipment to universities. The social sciences are again excluded from this provision. However, research and training in the social sciences involves sophisticated methodologies and statistical approaches. These are fundamental for scientific research in all fields and at the same time contribute to our understanding of economic and technological development. Much of the equipment donated by industry to universities under the provisions of the tax credit is in the general field of computers, which are used extensively by social scientists. For example, at the University of Michigan, some 35 percent of the total funded research usage at the university's computing facility is for research in the social sciences. Proportionally, social scientists use these computers almost as much as the natural and physical scientists use them. It does not make sense to cut off whole disciplines, disciplines that depend on computers for research that contributes to economic development, from sharing in the provisions of the tax credit.

4) A provision of S. 2165 distinguishes among disciplines in determining whether scholarship or fellowship income is tax exempt. This appears to be an unwarranted discrimination. Even if one accepts the argument that some disciplines are more equal than others, one cannot argue that the social sciences, which make important contributions to the production of new, technologically sophisticated products, should not share in the benefits of a bill designed to foster such contributions. To exclude students in these disciplines from tax benefits, while favoring students in others, is unwarranted.

For these reasons we request that the Senate Finance Committee change the provisions of S. 2165 to include, rather than exclude, the strong contributions social science research makes to the technological and economic growth of this country.

Chamber of Commerce of the United States of America
Washington

Statement
on
MAKING THE R&D TAX CREDIT PERMANENT (S. 2165)
before the
TAXATION AND DEBT MANAGEMENT SUBCOMMITTEE
and the
SAVINGS, PENSIONS AND INVESTMENT POLICY SUBCOMMITTEE
of the
SENATE FINANCE COMMITTEE
for the
CHAMBER OF COMMERCE OF THE UNITED STATES
by
C. William Schick
February 24, 1984

I am William Schick, Assistant Controller of United Technologies Corporation and a member of the Taxation Committee of the U.S. Chamber of Commerce. Our company is a member of the Chamber of Commerce of the United States, which is the organization I represent today. Accompanying me is Mr. David E. Franasiak, the Chamber's manager of Tax Policy. We appreciate this opportunity to discuss the Research and Development (R&D) Tax Credit.

United Technologies designs, develops, and manufactures products with high technology content. Our products include Pratt & Whitney jet engines, Sikorsky helicopters, Otis Elevators, Carrier air conditioners, and Mostek semiconductors. Our sales volume exceeds 14 billion dollars. We invested nearly one billion dollars in R&D last year. We carry out our work with 190,000 employees.

SUMMARY

Last June, we had the opportunity to discuss with some of you, at some length, the need for making the R&D tax credit permanent. We are pleased that your study has resulted in the proposal in S. 2165.

The Chamber vigorously supports the R&D tax credit. It now seems to be widely recognized that our Nation's economic progress depends on a long-term commitment to improve current products and processes, to develop new products and proceses, and to perform basic research. It also seems to be more widely understood that our Nation's technological leadership position is not as commanding as it once was, and greater R&D efforts are needed in the years ahead.

We at the Chamber are concerned that some aspects of tax policy in recent years have been of the on-again, off-again variety. The R&D credit is an example. It is unfortunate that a built-in sunset was included with the R&D credit when it was enacted in 1981. Our R&D shortfall cannot be cured in five years, nor in any particular preconceived time frame. In our view, sunsets are appropriate only when it is reasonably clear that the objective of a particular tax policy can be achieved in a particular time frame.

For these reasons, we do not believe a two, three, or even five-year extension is appropriate. We support permanency as reflected in S. 2165. In recommending permanency, we, of course, do not mean to suggest that Congress should not reexamine the R&D tax credit in the years to come. On the contrary, continued assessments should be made of this and all tax policies.

We have reviewed the revised definition of eligible R&D as contained in S. 2165. There may be some subsequent discussions of the definitional questions in which we may wish to participate or on which we may wish to respond. For example, certain of our members are concerned that in some cases functional and style improvements are so interwoven that it would be difficult to distinguish between them. We think this matter requires further study. At the same time, in principle, we support the revision. In particular, we think that decoupling the Section 44F definition from Section 174 is wise.

We also want to take this opportunity to recommend again that the 1.861-8 regulations, dealing with the allocation of U.S. R&D costs to foreign source income, should be dealt with soon. We reiterate that these regulations are badly conceived and are wrong. In our view, the most sensible resolution of this problem is to change the Code to provide that all R&D incurred in the United States is chargeable to U.S. source income.

Our Views in More Detail

As we have testified before, we do not think that certain of the sporadic changes in tax policy over the past decade have served our country's best interests.

As you well know, many features of our tax code have been designed to stimulate economic growth and jobs. Starting in 1962, the Investment Tax Credit was adopted. In 1971, DISC came into being. Then in 1981, after lengthy discussions, ACRS was adopted. Those were important measures then, and they continue to be important.

In 1982, just one year after ERTA was enacted, and at the height of the recession from which we are now emerging, some of these measures were cut back. The 1986 ACRS rate of 200% of the declinging balance was eliminated. The Investment Tax Credit was cut back. Safe Harbor leasing was repealed. Corporate tax payments were speeded up. In 1976 and in 1982, DISC was cut back. At the end of 1983, the Section 861 relief ended, and at the end of 1985, the R&D tax credit will sunset. We urge greater stability in tax policy. In urging stability, we do not rule out reform -- small reforms or large reforms. But given the code as it now exists, an important step toward achieving stability can be made by making the R&D tax credit permanent.

S. 2165 contains some provisions other than permanency and definitional reform. The proposal will treat depreciation in the same manner as lease costs. Logic supports this change. Start-up R&D will be eligible. Start-up R&D is that which enables a taxpayer to enter a new trade or business. New businesses are the cornerstone of job creation. Logic supports this change.

We take note that the other proposed changes will further stimulate R&D. Among these changes are: increasing eligible contract R&D from 65% of cost to 75%; making eligible basic research grants made to colleges and universities; and allowing deductions for donations of scientific equipment and related services to colleges and universities.

CONCLUSION

We strongly support the principles embodied in S. 2165, and for the sake of the private sector planners, action should be taken soon.

Chamber of Commerce of the United States of America
Washington

Comments on the Statement of John E. Chapoton
Assistant Treasury Secretary for Tax Policy
on R&D Tax Credit (S. 2165)

The Treasury Department, represented by the Assistant Treasury Secretary for Tax Policy, appeared at the Senate Finance Committee hearing on February 24, 1984 to comment on S. 2165.

In S. 2165, it is proposed, among other things, to revise the definition of Research and Development (R&D) expenditures which are eligible for the Section 44F R&D Tax Credit. The revision is intended to address shortcomings in the existing definition.

Perceived Shortcomings in the R&D Definition

The Treasury Department believes that the present definition of R&D as well as the proposed S. 2165 definition, is too broad. The Treasury statement takes exception to credits being taken by businesses such as fast food restaurants, baked goods, home building, publishing, banking, stock brokerage and movie production. Suspicion is expressed that the R&D activities of such businesses frequently do not involve "high technology" research.

While acknowledging that the S. 2165 definition is an improvement over the existing definition, the Department took specific exception to certain concepts in that proposed bill. For example, Treasury expresses objection to the S. 2165 concept, which would exclude from R&D tax credit eligibility only purely stylistic changes. Objection is expressed that S. 2165 would allow the cost of developing even trivial functional improvements. In an attempt to address these perceived shortcomings, certain concepts are proposed by Treasury which appear to be unworkable, and which will not effectively deal with the perceived shortcomings. In addition, the concepts proposed by Treasury will undermine the basic purpose of the R&D Tax Credit. These matters are described in the paragraphs that follow.

Concept of Significant Technological Improvement

The Department expressed the view that, to be eligible for the R&D credit, the R&D effort should be intended to result in a "significant technological improvement." While an objective basis could be established for the purpose of determining whether a particular R&D effort is "technological," whether or not a particular R&D effort is intended to or does result in a "significant" improvement is merely a matter of someone's opinion.

It is unlikely that in any particular case, any substantial facts will be present on which to base an opinion, beyond the fact that a taxpayer was willing to spend his own money on the R&D project. Logic suggests that the fact that a taxpayer is willing to expend his own funds in pursuance of an improvement should be conclusive that a planned improvement was intended to be achieved and that it was believed to be a significant improvement. It is not credible to presume that taxpayers knowingly or consciously expend large amounts on insignificant improvements.

No such concepts apply with respect to the Investment Tax Credit. To obtain the Investment Tax Credit (ITC), the taxpayer must merely acquire and put in use machinery and equipment. The ITC tax policy is certainly intended to result in increases in investments to acquire productive and useful machinery and equipment, but the administration of the ITC would become a shambles if the ITC were to restricted only to "significantly improved" machinery.

In support of its contentions, the Department's statement presented an example where a taxpayer's new computer model represented "merely" an attempt to catch up to existing, widely available technology or to copy another manufacturer's popular model. The view was expressed that R&D costs expended in order to develop such a computer should not be eligible for the R&D credit. On the other hand, if the technology underlying the competing computer was proprietary and secret -- that is, not "widely available" -- then the catch-up effort would be eligible.

It is obvious that if such a concept were to be adopted in the Code or in the Regulations, both taxpayers and the Treasury Department would be faced with substantial uncertainty as to whether particular R&D programs are eligible for the credit. Uncertainty would be the result because it is virtually unprovable whether or not particular technology is "widely available." It would be virtually impossible to collect sufficient facts on which anyone could reasonably conclude whether or not the computer project was merely an effort to catch up or to make a significant improvement.

From a tax policy viewpoint, the wisdom of adopting such a concept is highly questionable. Suppose, for instance, that the competing product which the U.S. taxpayer wishes to "catch up" to a Japanese product, based on "widely available" technology. The intention of the U.S taxpayer is to "catch up" in order to produce a competitive product in the United States. Under the proposed Treasury concept, the U.S. taxpayer would be denied the R&D credit.

Thus, the adoption of the "Significant Technological improvement" concept, even if it were capable of being reasonable administered, would defeat a principal reason that the R&D tax credit was adopted in the first place. That reason was, and remains, that the United States has lost its once commanding technological leadership position, and a national objective is to "catch up" and restore its historic position of leadership.

Concept of Substantial Risk

The Department proposes that if a taxpayer faces substantial risk that an intended technological result could not be achieved, such "fact" would be conclusive evidence that the taxpayer intended to achieve a significant technological improvement. Under such circumstances, the R&D costs would be eligible.

This concept has the same defects as does the "significant improvement" concept. There are no facts which can enable one to conclude whether or not an R&D project has any particular degree of risk. If this concept is adopted, entitlement to the R&D credit will depend on mere opinion. No tax policy is administerable if its administration depends on mere opinion, without definite guidelines. Moreover, this is a failure oriented concept. Presumably, taxpayers who fail in their endeavors would have little difficulty in sustaining their R&D costs as creditable, but those who succeed would incur the burden of demonstrating that they might have failed.

If such a concept is adopted in the Code or Regulations, it is probable that most R&D projects -- except failures -- will simply result in unresolvable contention between the Internal Revenue Service and the taxpayers. How can the Nation adopt tax laws or regulations where it is certain that reasonable people will disagree?

Concept of the Component

The Treasury Statement takes the view that if a taxpayer's intent is to develop a substantially improved component of a product, and that the taxpayer incurred a significant amount of R&D costs with respect to other aspects of the product or process, the eligible R&D costs should be limited to the costs of developing the particular component.

An example is given where a taxpayer introduces a new personal computer. The taxpayer develops a new type of a screen. The taxpayer incurs substantial R&D expenditures for developing the new screen, and for combining the various parts of the computer, including the screen into a product. The components, other than the screen, primarily include existing widely available components. On these facts, Treasury would consider the costs of developing the screen to be eligible for the credit, but propose that the costs of combining the other components into the computer would not qualify.

This concept has significant tax policy shortcomings. The new computer screen is useless unless it can be integrated and made to function in the computer. Under the Treasury example, presumably no R&D effort is expended on the components that are widely available. The only R&D effort that is expended is for the purpose of developing the screen, and then to integrate it into the computer. The integration project is an essential ingredient in the development of the screen and the product.

For example, suppose a taxpayer develops a new jet aircraft engine that offers increased durability and reduced fuel consumption. The taxpayer agrees to provide the engine to an airframe producer which already has in production a certified aircraft using a less efficient engine. The introduction of the new engine requires the airframe producer to establish an R&D program to make certain modifications to the aircraft so that the improved engine may be installed. Without such modifications, the improved engine is useless and the airframe producer would have to continue producing a less efficient aircraft, with no competitive advantages over a similar European aircraft. Under the Treasury's "component concept," would the essential R&D program of the airframe producer be qualified for the R&D credit? It appears the program would not be eligible.

It is highly questionable whether distinctions of this type are administerable, or represent sound tax policy. The development of any product begins with the development of its component parts. In actual practice, all of the component parts of a total product must be individually developed, and must be designed to function in harmony with all the other components, which together comprise the final marketable product. Without the integration effort, the individual components are useless.

The design objective of each component may vary in degree of risk and in degree of intended improvement. In some instances, some of the components may involve little improvement. However, the worthiness of the final R&D objective must be considered by the taxpayer in terms of the total end product, not in terms of individual components. Therefore, aside from the administrative and practical problems that adoption of the "component" concept would create, it seems that eligibility of the R&D effort should be considered primarily in light of the total product.

Concept of Routine or Trivial Improvements

Treasury expresses the view that the R&D credit should be allowed only with respect to development programs intended to result in meaningful functional improvements, but "routine or trivial" improvement programs should not be eligible. Moreover, programs intended to achieve changes in style would not be eligible.

This is another concept, the administration of which would be based on unprovable facts. Administration of such a concept would rest on unsupported opinion. While it is understandable that it is not in the Nation's interest to allow credits on trivial matters, presumably not much money is spent on "trivial" improvements. It is not wise to introduce a complex and unadministerable concept intended to resolve a trivial matter.

The concept appears to be intended, at least in part, to address the problem which arises when the distinction between functional improvements and style changes becomes blurred, it being implied that style is trivial. Currently, a popularly discussed example, referred to in the Treasury Statement, is the body of an automobile, where aerodynamic improvement can reduce fuel consumption, but another result of an aerodynamic improvement program can be to change the style or appearance of the body.

Under S. 2165, if the characteristics of a new or improved product are predominantly functional rather than stylistic, the taxpayer would be entitled to the credit. Treasury objects to the S. 2165 definition since it would exclude only purely stylistic changes, allowing "trivial" functional improvements. There is a question, from a tax policy viewpoint, whether style should be distinguished from function. The fundamental purpose of the R&D tax credit is to make the Nation more competitive. To be more competitive, the Nation needs to produce improved products and processes. Frequently, style is an important aspect of consumer products, and the cost of style changes are frequently inseparable from the cost of functional improvements.

Accepting, for the purpose of analysis, that it is proper to address the functional vs. style question -- where the two characteristics are merged -- it does not appear useful or practical to resolve the question by introducing the concept of "trivial vs. meaningful." Just as it is difficult to separate function from style, it is probably even more difficult to distinguish "trivial" from "meaningful," or "routine" from "nonroutine."

If it is decided to render style improvement ineligible, it appears that an approach along the lines of S. 2165 may be the best approach. Projects intended solely to improve style and taste could be made ineligible, but where style or taste are only one aspect of the program, the entire cost would be eligible.

Concept of "Experimentation in the Laboratory or Scientific Sense"

This concept appears to be the most useful of those discussed in Treasury's Statement. A generally accepted concept of technology is that it is created by engineers and scientists working in laboratories. The process consists of an effort intended to result in a new or improved product or process.

Here is a generally accepted definition of R&D: R&D consists of Basic Research; Applied Research; Development; and systems and Concept Formulation. Basic Research is directed toward an increase in knowledge of science. The primary aim is a fuller knowledge or understanding on the subject, rather than toward practical application. Applied Research takes place after related Basic Research, but is directed toward attempts to exploit

Basic Research discoveries or improvements in technology, materials, processes, methods, devices, or techniques. It attempts to advance the state of the art. Development is the use of scientific knowledge in the design, development, test or evaluation of a potential new product or services, for the purpose of meeting specific performance requirements or objectives. It includes the functions of design engineering, prototyping and testing. System and Concept Formulation are analyses and study efforts directed toward the identification of desirable new systems, equipment or components, or desirable modifications to components and existing systems or equipment.

Thus, R&D effort consists of concept formulation, design, acquisition of material, fabrication, and test -- all iterated and reiterated. The effort is performed directly by or is supervised by engineers and scientists whose objectives are to develop the new or improved product/process. The effort includes the acquisition of materials, model shop fabrication of prototype components, the subcontracting of fabrication of prototype component parts, integration of components, and the test of those materials and components, and the complete product, all under the control of an engineering department.

Engineers and scientists are readily identifiable by their position descriptions. The purpose of the work they do is identified by the written description of the functions and purposes of the engineering departments in which they work. Their objectives are readily identified by the work statements that they prepare and which are approved by their management. The costs they incur are identifiable by analysis of their departmental budgets and the R&D cost accounds for which they are responsible. It is the cost of the effort that engineers and scientists perform, supervise or are responsible for that should be eligible for the R&D credit. This area needs further examination, and that examination should yeid an acceptable definition of eligible R&D.

A similar approach could be followed in establishing a definition of eligible computer software development costs. It could be argued that only large companies organized R&D programs in such a way that the documentation discussed above is available. This standard could be made applicable only to those taxpayers which expend R&D above a certain threshold. In small cases, the principles set forth in S. 2165 may suffice.

S. 2165 Definition

While the S. 2165 definition may have some shortcomings, it is superior to the present definition and, for the reasons set forth here, it is far superior to the definition proposed by Treasury, but even it could be improved by adopting the suggestions we have made.

STATEMENT OF
THE COMPUTER AND BUSINESS EQUIPMENT MANUFACTURERS ASSOCIATION

The Computer and Business Equipment Manufacturers Association (CBEMA) is an association composed of approximately 42 manufacturers of computer systems, sophisticated business equipment and high technology electronics products. These products, and the equipment utilized to manufacture these products, are characterized by short useful lives. Technological obsolesence, more than physical wear and tear, causes computer equipment to depreciate in fact on an accelerated basis over five or fewer years.

Impact of Present Law ACRS

CBEMA members are very interested in suggested changes to present law ACRS as it applies to short-lived equipment, because, as enacted in 1981 and as modified in 1982, ACRS was designed primarily to benefit long-lived equipment. Indeed, under present law ACRS is in fact detrimental to businesses utilizing short-lived equipment, including computer and other high technology electronics equipment. Prior to the enactment of ACRS, high technology electronics companies generally depreciate their equipment over three, five or seven years utilizing the double-declining balance method. Table 1 below illustrates in present value terms at various discount rates the level of tax savings associated with an investment of $1,000 in such equipment.

Table 1[1/]

Present Value of Depreciation and ITC Under Pre-1981 Law (ADR, double-declining balance)

Discount Rate	3 yr. life (3.33% ITC)	5 yr. life (6.67% ITC)	7 yr. life (10% ITC)
0	$493	$526	$560
6	455	470	487
8	440	454	467
10	433	439	449
12	423	425	432
14	413	412	416

Under ACRS most equipment is depreciated over five years (with a 10 percent investment credit) on only a slightly accelerated basis; R&D equipment is depreciated over three years with a 6 percent investment credit. A one-half of basis adjustment is applied to the amount of investment credit claimed. If equipment is in fact retired prior to the last year of depreciation (an event which frequently occurs in the computer industry), the remaining unrecovered cost is deducted in the year of retirement, but the investment credit is proportionately recaptured (*i.e.*, the investment credit is reduced at a rate of 2 percent per year short of the full ACRS life with a commensurate

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[1/] The method of computing present value utilized in this table assumes that the realization of tax benefits for any taxable year is deferred for a six-month period.

decrease in the basis adjustment). Table 2 below shows the present value of a $1,000 investment in equipment under ACRS after the 1982 modifications in each of the above three relevant categories -- non-R&D equipment held for five years, non-R&D equipment retired at the end of the third year, and R&D equipment.

Table 2[1/]

Present Value of Post-TEFRA ACRS

Discount Rate	Non-R&D Equipment Held-5yr.	Non-R&D Equipment Held-3yr.	R&D Equipment
0	$537	$506	$506
6	473	452	464
8	455	437	452
10	439	422	440
12	423	409	429
14	409	396	418

A comparison of Table 1 and Table 2 indicates that ACRS after the 1982 Act does result in a reduction of tax benefits in most cases for equipment with a three, five or seven year useful life under realistic discount rates. Particularly noticeable is the reduction in tax benefits for non-R&D equipment that is in fact retired after three years--which is likely to be equipment most frequently owned by companies with the most rapidly changing technologies.

The fact that short-lived equipment did not benefit from ACRS is further reflected in studies to date which show that high technology companies generally, and electronics companies in particular, have relatively high marginal tax rates on new investments in capital assets compared to other industries. For example, the Economic Report of the President of February 1982 indicated that the lowest effective tax rates after ACRS existed in the mining, motor vehicles and transportation industries. While that study did not include a category for the electronics industry as such, the instruments and communications industries were included and had among the highest marginal tax rates of all included manufacturing industries. Subsequent studies have confirmed that under the ACRS system investments in high technology companies generally and high technology electronics companies in particular bear a higher marginal effective tax rate than investments in most other manufacturing sectors of the economy. See, e.g., Fullerton and Henderson, Long Run Effects of the Accelerated Cost Recovery System, Discussion Paper in Economics #20R, Princeton University, February 1983.

S. 1758 As an Alternative to Present Law ACRS

Because ACRS does not provide substantial depreciation benefits for high technology companies like CBEMA members, CBEMA has actively undertaken a review of alternative depreciation systems. This review has included a proposal like that contained in S. 1758 to established open-ended accounts and eliminate the partial basis adjustment of present law ACRS.

In reviewing S. 1758 CBEMA members recognize that any change to open-ended accounts could provide for some simplicity. Under open-ended accounts, a taxpayer each year would add the cost of machinery and equipment placed in service during the year in any equivalent class to the adjusted basis of the cumulative account for that class. Separate or vintage accounts for each year would not be required for depreciation purposes. However, under S. 1758, and presumably under any other proposal for open-ended accounts, investment credit recapture provisions would remain in the tax laws. Thus, some records would need to be kept of placed-in-service dates for all equipment.

Notwithstanding the simplification which might be achieved, CBEMA members have a number of concerns about any proposal for open-ended accounts which are not adequately addressed in S. 1758. First, and most importantly, it must be recognized that any open-ended account proposal inherently spreads the recovery of capital costs over a longer time period than occurs under ACRS or pre-1981 depreciation provisions. This results because open-ended accounts utilize the declining balance method of depreciation, under which depreciation is calculated as a percentage of the remaining undepreciated cost of an asset. Under this method an asset is really never fully depreciated. Its cost is merely reduced every year until the undepreciated amount is negligible, a point which may not be reached until 15 or 20 years after the asset is placed in service.

Because it provides for capital recovery over a longer period, taxpayers can be kept whole under an open-ended account system only if the switch to open-ended accounts is accompanied by some additional change favorable to taxpayers. S. 1758 attempts to accomplish this result by repealing the one-half of basis adjustment. Whether the one-half of basis adjustment repeal fully compensates taxpayers for the slower depreciation inherent in an open-ended accounts system depends on the discount rates used to compare the tax benefits of current law ACRS with those under the open-ended account proposal. Our own analysis indicates that the provisions of S. 1758 may not be sufficient to keep taxpayers whole at even relatively low discount rates (*e.g.*, 8 to 12 percent). However, the high cost of capital and volatility of high technology electronics companies mean that the relevant discount rates to determine the value of tax or other financial benefits for CBEMA members should be in the range of 15 to 20 percent. Analyzed at these discount rates, S. 1758 falls significantly short of keeping taxpayers whole compared to present law. Thus, if enacted, S. 1758 would strike a further blow against the equitable cost recovery of high technology electronic equipment, including computer equipment.

In addition, under S. 1758 it is not clear that the benefits from the elimination of recapture upon the disposition of equipment would be extended to so-called "dual purpose" equipment. New computer equipment is often leased by computer manufacturers to customers. That equipment is often subsequently purchased by the lessees. Under present law equipment sold in these circumstances is called "dual purpose" equipment because while under lease the equipment is treated as a depreciable asset, but once sold, the equipment is treated as inventory. The bill does not make clear whether the impact of the sale of the equipment is to remove an amount equal to the sale proceeds from the open-ended account, or whether some amount in the account must be attributed to the equipment and income recognized in excess of that amount, if any. If the latter rule would result from the open-ended account proposal of S. 1758, the simplicity of open-ended accounts would be lost and substantial problems would be caused for many computer companies.

Other Alternatives to ACRS

For both these reasons, CBEMA opposes S. 1758. CBEMA believes nonetheless that efforts to search for alternatives to present law ACRS should continue. Further, CBEMA believes that this search should extend to serious consideration of proposals to expense equipment generally or short-lived equipment in particular. Such a proposal would clearly constitute a simplification, would not likely cost significant revenues over the long run, and would eliminate the disadvantageous treatment of short-lived equipment which continues under present law ACRS.

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The Honorable Bob Packwood
Chairman, Subcommittee on Taxation
and Debt Management
Committee on Finance
221 Dirksen Senate Office Building
Washington, D.C. 20510

March 5, 1984

Re: S. 2165 High Technology Research and Scientific Education Act of 1983

Dear Senator Packwood:

As an international accounting firm serving clients from a broad spectrum of industries, Deloitte Haskins & Sells enthusiastically supports the thrust of S. 2165. We submit herein our comments for inclusion in the record of the Subcommittee's February 24, 1984 hearings on the bill.

U.S. technological pre-eminence is essential to the long run health of our domestic economy. As competition intensifies in the international market, however, other industrial nations are threatening our superiority. Cultivation of our status as an international technological leader requires the maintenance of a fertile environment for the conduct of research and development. The enhancements of the R&D tax credit offered by the High Technology Research and Scientific Act of 1983 will help create that environment.

The initial enactment of the R&D credit in 1981 demonstrated Congress' understanding of the need for a tax policy that would support R&D and thereby encourage U.S. technological advancement. The availability of the credit ensured that research spending remained strong throughout the 1982 recession. In fact, among the so-called high technology industries, whose growth is rooted in technological change, R&D expenditures increased during 1982 between 15 and 33 percent over 1981 levels.

Despite its evidently positive effects, the credit as legislated in 1981, has some deficiencies which are addressed in S. 2165. In addition to other changes, the bill contains three provisions that are fundamental to a sound Federal R&D policy generally, and to the effectiveness of the credit in particular. First among these is §101 of the bill which eliminates the 1985 sunset provision of the current law. Second, the bill clarifies the treatment of software research expenditures. Finally, it extends availability of the credit to start up companies whose research efforts are not covered under current law.

The permanency of the credit is important both as a sign of the government's long run commitment to the support of research and development, and as a determinant in a firm's decision as to the size and timing of an R&D project. Mere temporary extension of the credit is not an adequate demonstration of Federal commitment. Without reasonable certainty that the credit will be available in future years, a firm cannot be expected to factor the effective cost reduction offered by the credit into its R&D decisions. Consequently, the credit cannot have the full stimulative effect intended by Congress. In its current state, the credit discriminates in favor of shorter R&D undertakings at the expense of longer run projects -- those more likely to yield the revolutionary advancements.

Section 102 of S. 2165 enhances the existing credit by clarifying the definition of qualified research expenses that are eligible for inclusion in the credit base. We believe the financial accounting definition as modified in S. 2165 provides a more relevant measure of true research activities than the I.R.C. §174 definition currently adopted by the credit. In particular we support the explicit inclusion of the credit to software-related research. Denial of the credit to software research expenditures, as proposed in January 1983 Treasury regulations, improperly discriminates against an important dimension of the high technology sector. Furthermore, it is contrary to congressional intent. S. 2165 provides welcome redress.

Finally, under the current credit rules only expenditures incurred "in carrying on" a trade or business are eligible for the credit. Consequently, corporations not actively producing and selling products cannot respond to the stimulus of the credit. Yet in the high technology sector many important technological changes are advanced by these fledgling companies. S. 2165 acknowledges the potential for technological progress offered by start up firms. The bill adopts instead a more workable "in connection with" trade or business standard. Of course the effect of the credit may be delayed because start up companies do not immediately generate taxable income against which to apply the credit. Nevertheless, the importance of such firms in the technological process justifies their access to the credit.

The bill unfortunately continues to discriminate against those mature industries which have made and will continue to make significant technologial advancements over a period of time by imposition of the restrictive criteria of "new or significantly improved business item" for enjoyment of the credit. This restriction should be relaxed.

Deloitte Haskins & Sells strongly supports the R&D tax credit as an effective means of encouraging technological progress -- in both the basic and the high tech industries. Yet, as we noted, the credit requires modification. By making the credit permanent and by clarifying the definition of qualified research expenses, the bill before the Subcommittee should substantially enhance the environment for productive research activities.

Yours very truly,
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SENATE COMMITTEE ON FINANCE

SUBCOMMITTEE ON TAXATION & DEBT MANAGEMENT

SUBCOMMITTEE ON SAVINGS, PENSIONS & INVESTMENT POLICY

HEARING ON FOUNDATIONS, HIGH TECHNOLOGY AND DEPRECIATION PROPOSALS

(S. 1857, S. 2165, & S. 1758)

STATEMENT OF DAVID A. BERENSON

ERNST & WHINNEY

FEBRUARY 24, 1984

Expanded Definition of Qualified Research

(S. 2165 §102, amending I.R.C. §44F(d))

A Revised Definition of Research

Section 102 of Senate Bill 2165 makes considerable headway towards clarifying the current uncertainty in the R&D credit area by defining what constitutes "qualified research" for credit purposes. This proposed new definition of qualified research draws from two prior bills and their respective reports:

(1) Tax Reduction Act of 1980, H.R. 5829, 96th Cong., 2d Sess. §232 (1980) [S. Rep. No. 940].

(2) Tax Incentive Act of 1981, H.R. 4242, 97th Cong., 1st Sess. §241(a) (1981) [H.R. Rep. No. 201].

In addition, other sources apparently include: (3) I.R.C. §44F(d); (4) Treas. Reg. §1.174-2; and (5) Prop. Treas. Reg. §1.174-2. In general, items (1), (2) and (5) rely extensively on the Financial Accounting Standards Board Statement of Financial Accounting Standards No. 2 ("FAS2"), which items (1) and (2) acknowledge.

It is appropriate to strive for consistency between tax and financial accounting in this area. An amended Section 44F(d), however, must be as precise in its definition as possible. As proposed it is generally well constructed, but the areas noted below may still need some attention.

When Does R&D Cease
(Prop. I.R.C. §44F(d)(2)(A))

Often, one of the most difficult determinations in classifying R&D is ascertaining when the R&D phase has ceased and commercial activities begun. Evidently, Proposed Section 44F(d)(2)(A) is constructed with a view to this determination. It states that qualified research does not include:

> "(A) any activity with respect to a new or significantly improved business item after such business item has been fully developed to the point where it constitutes a finished business item which meets the specific functional and economic requirements of the taxpayer for that item and is ready for commercial sale or use." (Emphasis added.)

But what does "specific functional and economic requirements" mean? Obviously, this is a relatively subjective determination. And yet this FAS2 ¶8 language is not found in the current statute, regulations or rulings, thus guidance will have to be provided in the committee reports. The FAS2 ¶8 text from which it is derived will apparently be of no authority, either, nor will prior cases and rulings, e.g., Red Star Yeast & Products, Co., 25 T.C. 321 (1955), Ltr. Ruls. 7948031 (Feb. 28, 1979) and 8140001 (Mar. 10, 1981).

Our Recommendation: Authoritative guidance for distinguishing between research and commercial phases of a project should be provided in the committee report. This should specifically focus on the intended meanings of the phrase "functional and economic requirements of the taxpayer" in Proposed Section 44F(d)(2)(A).

Significantly Improved Business Item
(Prop. I.R.C. §44F(d)(1), (3))

The proposed amendment to Section 44F(d) limits the credit to research performed "to develop a new or significantly improved business item." This condition is established in paragraph (1) and defined in paragraph (3). Unfortunately, the concept of "significantly" is not addressed in either paragraph. A rule of significance would be a new addition to the interpretation of what constitutes R&D for tax purposes. Although FAS2 ¶8, from which it is derived, refers to "bringing about a significant improvement to an existing product or process," there is no reference to a significant improve ment in either the current statutes or regulations. In fact, Treas. Reg. §1.174-2(a) in defining research and experimental expenditures uses only the word "improvement" without a qualifier.

Our Recommendation: Since there is no precedent in tax law for establishing a significance rule in R&D matters, this word should be dropped from Proposed Section 44F(d). Alternatively, if a reference to "significantly" were included in the statute, the committee reports should explicitly state what this means.

Computer Software-General Comments (Prop. I.R.C. §44F(d)(4))

The proposed definition of qualified research contains only one specific reference to computer software. Proposed Section 44F(d)(4) limits the credit on otherwise qualifying "business items" to only three types of internal software:

> ". . . Provided, however, that computer software that is separately developed by the taxpayer solely for internal use of the taxpayer (other than for use in (i) qualified research (within the meaning of this subsection (d)), (ii) a production process, or (iii) the performance for customers of services of which such software together with the corresponding hardware is the predominant component) shall be treated as a business item for purposes of this section to the extent provided for by regulations to be prescribed by the Secretary."

Our Recommendation: For consistency, software should be defined in the statute or committee reports, as it has previously, by reference to the definition contained in Rev. Proc. 69-21, 1969-2 C.B. 303. Similarly, there is a small body of case law and rulings that should be acknowledged for additional taxpayer guidance.

The treatment of computer software should be specifically dealt with in a revised statute, with appropriate explanations and examples contained in any committee reports. While this should be obvious, it is not what occurred in the development of Prop. Reg. §1.174-2, which has relied extensively on H.R. Rep. 201, 97th Cong., 1st Sess. 109-126 (1981). Since the House report followed the qualified research definition proposed in the Tax Incentive Act of 1981, supra, instead of the reference to Section 174 presently found in Section 44F(d), considerable confusion over crediting software costs has resulted. Inappropriate reliance on the House and Joint Committee reports, has led to an attempted denial of the credit "for the development of software the operational feasibility of which is not seriously in doubt." Prop. Treas. Reg. §1.174-2(a)(3). For purposes of determining R&D, there is no rationale in an "operational feasibility" test to determine if developing software or any other type of research is creditable unless, perhaps, it is with a view to the economic risk undertaken by the taxpayer.

Computer Software - Statutory Construction (Prop. I.R.C. §44F(d)(4))

Several parts of the reference to software in Proposed Section 44F(d)(4) deserve comment. First, the phrase "computer software that is separately developed by the taxpayer" (emphasis added) is used. What is the intended meaning of "separately developed"? Since the phrase is tied to the requirement that it be solely for the taxpayer's internal use, should this be interpreted as no relationship to any other R&D project (whether qualifying or not)? Alternatively, does it preclude the taxpayer from contracting or joint venturing with another party for internal-use software?

Second, should the reference to "solely" be interpreted as no simultaneous development of software for internal use and external sale? Then, too, of what consequence is it for a taxpayer to develop nonqualifying software for internal use which is so successful that it is subsequently sold, leased or licensed* outside the firm, i.e., it will become a qualifying business item notwithstanding the fact that it initially did not qualify? Will the intent when an R&D project begins control the creditability of costs forever after? Wouldn't a conversion from nonqualifying internal to qualifying external use at some later point in the R&D process trigger the applicability of the credit? How then should a joint effort for nonqualifying internal-use software and qualifying external-sale software be treated?

Third, as quoted above, proposed paragraph (4) of Section 44F(d) includes three safe harbors for internal-use software. The third provides for situations where "the performance for customers of services of which such software together with the corresponding hardware is the predominant component." Surely there are many businesses that believe their computer software and hardware is the "predominant component" in their ability to provide services. Yet how should this distinguishing facet of a business be measured -- computer utilization in time, payroll vs. computer costs, or proportionate capital investment?

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*Although not addressed in this bill, we would encourage the Committee to consider a problem related to a company's method of selling software. Specifically, to assure copyright inviolability, software companies typically structure their product sales as a nonexclusive and nontransferable license to use their software. This technique, established for business reasons, potentially exposes such companies to the 50% personal holding company tax.

Section 543(a)(4)(C) provides that a copyright royalty, which constitutes PHC income, arises where compensation is received for the right to use an interest in a copyrighted work. Further, the exclusion from PHC income of copyright royalties that constitute 50% or more of the company's gross income will not be available when the copyright relates to works created in whole, or in part by any shareholder. Section 543(a)(4)(A).

Accordingly, since we believe any "royalty" income of such a business was not intended by Congress to be PHC income, an exemption in the statute, such as that for film rents, should be enacted.

Finally, this paragraph indicates that internal-use software, other than the designated safe-harbor kind, will only be subject to the credit to the extent provided for by regulations. Obviously, this creates uncertainty and speculation about what other types of internal software development will qualify. Moreover, to the extent certain software development would not qualify, it tips the scale inequitably towards purchased software -- the creation of which should qualify to the extent it is a new or significantly improved business item for the seller -- because it represents a marketed product.

Our Recommendation: We believe the test for computer software should be the same whether it is developed for internal use or external sale. If the above language is included in a final bill, however, we submit that the above items warrant either changes in the proposed statute or a complete description in the committee report. Otherwise, the present morass of taxpayer difficulty in determining allowable R&D credits for computer software will continue.

Eligibility of Depreciation for the Credit
(S. 2165 §103, amending I.R.C. §44F(b)(2))

Senate Bill 2165 would amend current law Section 44F(b)(2) to include as "in-house research expenses" the amount of depreciation or cost recovery allowed for tangible personal property used in the conduct of qualified research. We believe that the cost of using equipment for qualified research is an expense attributable to such research and should be eligible for the R&D credit. However, we are concerned that this provision may result in the trade-off of investment tax credit (ITC) otherwise available for such property. Several court decisions have recognized a presumption against allowing double deductions, double credits, or their practical equivalent for the same expenditure unless *specifically provided for* in the Code. *See* *United States v. Kelly Oil Co.*, 394 U.S. 678, 684 (1969); *Charles Ilfeld v. Comm'r.*, 292 U.S. 62, 68 (1934); *O'Brien v.*

Comm'r., 79 T.C. 776, 784 (1982). Allowing ITC for the cost (basis) of tangible personal property and the R&D credit for the depreciation of such property would appear to us to be a double credit or the practical equivalent.

Our Recommendation: We do not believe that such a disallowance was intended, and we therefore propose that the Code be amended to specifically provide for the dual credit.

Credit Availability for Corporations, Partnerships and Joint Ventures (S. 2165 §104, amending I.R.C. §44F(b)(1)

Trade or Business Exception for Corporations

Section 104(a) of the bill exempts corporations (other than S corporations, personal holding companies, and certain service organizations) from the trade or business requirement of IRC Section 44F(b)(1). This appropriately eliminates the problem in start-up situations when a corporate taxpayer has not yet established a trade or business. Nevertheless, there is no theoretical reason for excluding S corporations and partnerships from the same rule.

Exclusion of R&D Partnerships

It is unclear why, short of specific statutory language, R&D partnerships are precluded from claiming the credit. If Section 44F is designed to stimulate research, why should a financing vehicle such as an R&D partnership be prevented from claiming a credit on its contract research? In such instances, since most partnerships contract out the research, the credit usually would amount to no more than 8.125 percent [(65% contract research - 50% base period minimum) x 25%]. Furthermore, for small start-up ventures, usually entailing $1 to $5 million in financing, the ability to use the credit might be just what they need to reach a threshold of investor acceptance.

Between one-third and one-half of the portion of each of the Economic Recovery Tax Act of 1981 committee reports that are devoted to the trade or business requirement involve an example describing a typical R&D partnership. Given the context in which each appears, it might be argued that the main thrust of the "carrying on a trade or business" requirement was to prevent a credit for such arrangements. In other words, the Section 174 language "in connection with a trade or business" would have, without specific statutory language to the contrary, provided a credit under such circumstances.

This shift in congressional intent represents a step backwards from the intent of Congress to stimulate research as demonstrated in Section 174. The Supreme Court has stated in Snow v. Comm'r., 416 U.S. 500, 503 (1974):

> We read Section 174 as did the Fourth Circuit Court of Appeals in Cleveland "to encourage expenditures for research and experimentation." 297 F.2d, at 173. That incentive is imbedded in Section 174 because of "in connection with" making irrelevant whether petitioners were rich or poor.

Thus, the Supreme Court in interpreting statutory language aimed, at least in part, to equalize the treatment of small and large firms.

Further, the apparent intent of the trade or business requirement concerning R&D partnerships makes no sense in the respect that it leads to a situation in which no one obtains the credit. Even though the partnership is not eligible, the firm actually doing the research is prevented from claiming the credit, too, because the research is funded by a contract. In contrast, research firms obtaining their financing from normal channels (e.g., bank loans, private debt, stock offerings) would be fully entitled to the credit if the trade or business requirement is already met or, under the bill, if it is a corporation. Consequently, the result is that once again -- as occurred prior to enactment of Section 174 -- the statute discriminates against small, up-and-coming firms. Since they cannot find risk capital in other ways, such firms may resort to an R&D partnership to finance their research ventures. Yet this strategy is at a higher after-tax cost because the credit is not available to the R&D partners or the research firm.

R&D Partnerships in Jeopardy

A properly structured R&D partnership is not abusive; it does not typically lead to multiple writeoffs of the invested amount. Under current proposals (outside of this bill), however, R&D partnerships would be in additional jeopardy. As noted in the hearing pamphlet on Proposals Relating to Tax Shelters and Other Tax-Motivated Transactions, Staff of the Joint Committee on Taxation, February 17, 1984, p. 70, syndicates (other than farming) would be denied prepayment deductions until the future period in which economic performance occurs. R&D partnerships, which have a valid function in providing high-technology financing, would be subject to such a rule according to the summary information available at this time.

With no immediate deduction allowed, a tax preference item created when it is, and the continuing harsh treatment denying the R&D credit, R&D partnerships will surely wane as an R&D financing vehicle.

Our Recommendation: This treatment of R&D partnerships is not in the national interest of promoting research, nor do we believe it is really the intent of Congress. We propose that the statute be amended by deleting the trade or business requirement to allow the credit for qualifying research of partnerships and S corporations.

Expansion of Credit for University Basic Research
(S. 2165 §201, amending I.R.C. §44F(a), (e), (f))

It is well known that our colleges and universities contain some of the finest research scientists in the United States. Nevertheless, these same colleges and universities are often underfunded in their attempts to provide adequate research facilities.

The amendment of Section 44F(c) to increase its incentive effect is quite appropriate. Many potential donors reject the current approach because (i) they do not have enough incremental R&D to qualify; (ii) the search of accounting records to ascertain base period amounts and miscellaneous current R&D is not worth the effort; or (iii) the typical effective credit rate of 8.125 percent (65% x 50% x 25%) is not attractive enough.

The following benefits could be realized by the proposed expansion in the R&D credit for basic research:

(1) Students will have a broader educational experience, e.g., exposure to industry, easier identification of dissertation topics, and potential opportunities for employment.

(2) More fellowships for talented students may be provided.

(3) Relations with a business donor may provide a source of part-time faculty for the college or university.

(4) Faculty may be stimulated through interaction with industrial scientists and engineers, and through access to specialized equipment.

(5) Grants can help maintain or improve faculty salaries, while also aiding young faculty investigators in beginning their own research.

(6) Colleges and universities may avoid much of the bureaucractic red tape that permeates the traditional process of obtaining grants.

(7) Potential new products and processes may be based on the additional sources of ideas, knowledge and technology found in a university.

(8) Through research grants, competent scientists around the country may be utilized without expanding in-house corporate research facilities; this is indicative of the high benefit-to-cost ratio these arrangements entail.

(9) In-house scientists and engineers may be stimulated by contact with their university counterparts.

(10) The university setting provides a basis for comparative evaluation of internal R&D and timely assessment of current industrial practices.

(11) The business/university partnership facilitates rapid technological transfer from research to application.

Our Recommendation: The proposed expansion of the credit for corporate donations to support college and university basic research should be enacted.

Contributions of Scientific and Technical Property (S. 2165, §§201(c), 202, adding I.R.C. §§44F(f)(7), 174A)

Senate Bill 2165 would replace the Section 170(e)(4) charitable contribution deduction, currently available to certain corporations that manufacture scientific property, with a similar but expanded deduction under Proposed Section 174A. The bill would broaden the range of activities in which donated property may be used and would make purchased property and qualified services performed pursuant to a service contract transferred with the property eligible for the deduction. The bill would disallow, however, the credit currently available under Section 44F(e) for property donated to an institution of higher education for basic research.

We believe that the bill's broadened definition of "qualified scientific property" more adequately identifies those sciences and technologies where increased research activities are desirable and is potentially more likely to achieve its objective. Nevertheless, we feel that the reduction of potential tax savings available from qualified transfers could undermine the effectiveness of the deduction. In addition, our comments below address certain language in the bill that we find inappropriate or deserving of clarification.

Loss of Credit for Donated Property
(Prop. I.R.C. §44F(f)(7))

The bill would limit the amount of deduction allowable for donated property to 10 percent of the taxpayer's taxable income (as adjusted in the same manner as currently under Section 170(e)(4)) and disallow the credit presently available under Section 44F(e) for property donated to an institution of higher education for basic research. The elimination of the tax credit would reduce the incentive provided under current law for donating scientific property to institutions of higher education. We believe that the reduced incentive will trigger a reduction in property donations for basic research (without consideration of any positive effects of Sections 201(a)-(b) of the bill) and thus fail to alleviate the funding problem that presently exists for equipment-intensive research.

Computer Software - Basis
(Prop. I.R.C. §174A(d)(1))

The amount of the allowable deduction for tangible personal property and computer software that is Section 1221(1) property (i.e., inventory) is defined in Proposed Section 174A(d)(1) to be a function of the taxpayer's basis in the property. The bill does not, however, define basis. Should the taxpayer's basis in transferred software include the cost of developing such software or is the taxpayer's basis limited to only the cost of reproducing copies (including any manual) of the transferred software? We believe that the drafters of this legislation intended to provide an incentive for software developers to contribute qualified software to educational institutions. This intent would not be served by placing a low basis, such as copying costs, on developed software. To the contrary, this intent would best be served by including software development costs in the deductible basis.

Our Recommendation: We believe that the donor's "basis" in computer software should be defined in the statute to include the costs of both reproducing software copies and the development that preceeds it.

Computer Software - Characterization (Prop. I.R.C. §174A(c)(1))

The bill defines "qualified scientific property" in Proposed Section 174A(c)(1) to mean "computer software or tangible personal property that is described in paragraph (1) of Section 1221 or that is property used in the taxpayer's trade or business (as defined in Section 1231(b))." While this definition clarifies that computer software is intended to be eligible for the deduction, it also suggests that computer software constitutes property other than tangible personal property.

A position that computer software does not constitute tangible personal property is inconsistent with the current trend of state court decisions involving sales or use taxation. Because state sales or use tax statutes normally authorize the taxation of "tangible" personal property, the sale of software is subject to taxation only if (i) bundled with hardware, (ii) considered to be tangible personal property under state law, or (iii) specifically subjected to taxation in a separate category of a state statute. At present, more than 30 states impose a statutory sales tax on software transfers, generally based on the premise that software is an item transmitted on some tangible media, e.g., cards, tapes and disks. See Treasury Comptroller v. Equitable Trust Co., 464 A.2d 248 (Md. Ct. App. 1983); Chittenden Trust Co. v. King, 465 A.2d 1100 (Vt. Sup. Ct.

1983). Precedent also exists at the federal level for treating capitalized software costs as tangible personal property. See Texas Instruments Inc. v. U.S., 551 F.2d 599 (5th Cir. 1977) (investment tax credit allowed for field tapes, output tapes and analog films). See also Bing Crosby Productions Inc. v. U.S., 588 F.2d 1293 (9th Cir. 1979); Walt Disney Productions v. U.S., 549 F.2d 576 (9th Cir. 1977).

Our Recommendation: We propose that "qualified scientific property" be defined in Proposed Section 174A(c)(1) as follows:

> "tangible personal property (which for purposes of this section includes computer software) that is described in paragraph (1) of Section 1221 or that is property used in the taxpayer's trade or business (as defined in Section 1231(b)).

This terminology clarifies that computer software is eligible for the deduction while being neutral as to its characterization.

Computer Software - Trade or Business Property (Prop. I.R.C. §174A(c)(1), (d)(1))

If the bill is presumed to be internally consistent as constructed -- i.e., computer software identified separately from the category of tangible personal property -- then references to "tangible personal property" in subparagraphs (C), (D) and (E) of Proposed Section 174A(c)(1) and Proposed Section 174A(d)(2) could be interpreted to exclude computer software. Similarly, references to "property" in subparagraphs (B), (F), (G), (I) and (J) of Proposed Section 174A(c)(1) and to "personal property" in Proposed Section 174A(c)(1)(C) could be interpreted to include software.

For instance, pursuant to Proposed Sections 174A(c)(1)(C), (D) and (E), inventoried computer software must be transferred within six months of the date it is substantially assembled; however, it would need to be neither "50 percent assembled by the taxpayer" nor new property in the hands of the recipient. Proposed Section 174A(c)(1)(C)(ii) requires tangible personal property that is Section 1231(b) property to be transferred not more than three years after the property is first placed in service. Under a consistent interpretation of the bill, this proposed section would not apply to computer software. Thus, the bill evidently considers computer software to be tangible personal property in this context which must be transferred within three years or, alternatively, computer software used in the taxpayer's trade or business either is not subject to the three-year requirement or is not intended to be eligible for a deduction.

Similarly, Proposed Section 174A(d)(2) refers only to "tangible personal property" in defining the allowable deduction for Section 1231(b) property. Thus, either the drafters of the legislation considered computer software to be tangible personal property in this context and therefore eligible for a limited deduction, or computer software used in the taxpayer's trade or business is eligible for an unlimited deduction, or possibly, no deduction at all.

Our Recommendation: Failure to separately identify computer software throughout the bill results in internal inconsistency within the bill. We propose that sections of the bill pertaining to Section 1231(b) property should state whether used computer software is qualified scientific property for purposes of that section, with regard to all transfers or certain transfers only. We believe that a deduction should not be available for used software which has been copied by the donor or which is obsolete in the hands of the donor. Nevertheless, we feel that used software transferred together with compatible hardware should be eligible for the deduction. To hold otherwise would hamper both the donation of used computers and their usability to the donee institution.

Transfer of Section 1221(1) Property (Prop. I.R.C. §174A(c)(1)(C))

The bill provides that Section 1221(1) property (i.e., inventory) must be transferred not later than six months after the date upon which the assembly of the property is substantially completed. Under present law, Section 170(e)(4)(B)(iii) of the Code requires such property to be contributed not later than two years after the date the construction of the property is substantially completed. If the reason for the shorter holding period requirement is to permit deductions only for contributions of nonobsolete, state-of-the-art equipment, we feel the six-month holding period is too limiting. Not only may inventory avoid obsolescence for significantly longer than six months, but the proposed legislation is inconsistent by allowing in Proposed Section 174A(c)(1)(C)(ii) a deduction for Section 1231(b) trade or business property that is less than three years old. Surely, three-year-old trade or business property is more likely to be obsolete than six-month-old inventory.

Our Recommendation: We believe that the standard for receiving the deduction should be the usefulness of the property to the donee. Accordingly, we propose that any transferred Section 1221(1) property must be used by the donee for one year in its intended use to qualify the donor for the deduction in the year of contribution. If a maximum holding period is desired, we propose that the same two-year holding period apply to both Section 1221(1) and Section 1231(b) property. This will eliminate the inconsistency noted above in the bill.

Assembled by the Taxpayer (Prop. I.R.C. §174A(c)(1)(D))

In the case of transferring Section 1221(1) tangible personal property (but excluding computer software?), the bill requires that such a transfer be "of property which is at least 50 percent assembled by the taxpayer." The bill does not, however, define this standard. Should the 50-percent-assembled requirement be measured by dollars spent, value added, hours of assembly, parts used, a combination of these, or some other measure?

Under present law, Section 170(e)(4)(B)(ii) of the Code requires contributed property to be constructed by the taxpayer. The term "constructed by the taxpayer" is defined in Section 170(e)(4)(C) to include only property for which the cost of parts used in the construction (other than parts manufactured by the taxpayer or a related person) do not exceed 50 percent of the taxpayer's basis in the property. But unlike the present law, with its reference to the taxpayer's basis as a yardstick, the use in the bill of a "50 percent assembled" standard apparently would require accumulating information to measure the "50 percent" from every other party from whom the taxpayer has acquired "assembled" components.

The term "assembled" is more liberal than the term "construction" and should result in the deduction being available to a broader spectrum of taxpayers. This is consistent with our perception of the provision's intent. Nevertheless, a clarification of the term "assembled by the taxpayer" is necessary in order to avoid definitional problems from causing this test to be nearly unmeasurable.

Our Recommendation: The "50 percent assembled by the taxpayer" standard should either be defined in the statute or disregarded. This might be accomplished by adopting into Proposed Section 174A(c)(1)(D) the language of Section 170(e)(4)(C) with a form of the term "assembly" substituted for the term "construction" in each place a form of it appears. If this approach is taken, we believe that a clarification of the terms "part" and "related person" is in order. For example, is a circuit board a single "part" or is it required to be broken down into its component parts. Related person is defined differently throughout the Code. The intended definition should be referenced in the statute.

As an alternative standard, we propose that the taxpayer be required to "manufacture or produce" the property to be eligible for the deduction. This standard already is used in other parts of the Code and has been defined in Rev. Rul. 81-272, 1981-2 C.B. 116, to include assembly and other processes where utility is added to the property. We believe that a utility-added concept would achieve the goal of making a deduction available to taxpayer's who are incurring direct and indirect production costs in connection with the property.

Transfer of Section 1231(b) Property (Prop. I.R.C. §174A(c)(1)(C)(ii))

As already noted, the bill would allow a deduction for tangible personal property used in the taxpayer's trade or business and which is transferred not later than three years after the property is first placed in service. Under present law, no similar deduction is available for charitable contributions of Section 1231(b) property. We believe that the extension of the deduction to Section 1231(b) property would prove to be a valuable addition to the existing incentives for charitable transfers of scientific property. However, the transfer of Section 1231(b) property under the stated conditions would trigger a recapture of the 10-percent investment tax credit pursuant to Section 47(a)(1) as well as depreciation recapture pursuant to Section 1245(a)(1).

Our Recommendation: We propose that the donation of Section 1231(b) property to institutions of higher education for education or research be made an exception to the recapture rules. This exception should be conditioned on the donee's use of the property for its intended purpose for one year. A period longer than one year may result in the donee's unnecessary retention of obsolete or semi-obsolete equipment. Potential recapture should be borne by the donor.

As we discussed earlier, we propose that the required holding period for Section 1221(1) property and Section 1231(b) property be identical at two years. We believe that requiring different holding periods will cause the bill to be internally inconsistent in that inventory that has been held for more than six months might be converted into Section 1231(b) property and become eligible for a deduction.

Original Use of Section 1221(1) Property (Prop. I.R.C. §174A(c)(1)(E))

The bill would allow a deduction for the transfer of Section 1221(1) tangible personal property (but excluding computer software?) only if the "original use" of the property is by the recipient. A similar requirement exists under current law in Section 170(e)(4)(B)(iv). Neither the bill, Section 170(e)(4), nor existing committee reports define original use. For purposes of depreciation and investment tax credit, original use means the first use to which the property is put, whether or not this use corresponds to the use of the property by the taxpayer. *See* Treas. Reg. §§1.167(c)-1(a)(2) and 1.48-2(b)(7).

A manufacturer's holding of property as inventory might be considered a "use" of the property. We do not believe that this "use" of the property by the manufacturer is intended to adversely affect the eligibility of the property for the deduction. An analagous situation presents itself in the investment credit area where a lessor of Section 38 property may elect to pass through the credit to a lessee who is an original user of the property. This provision was intended to allow the party actually using the property to be able to claim the investment credit. Original use, however, would generally occur with the lessor in his leasing business. The Treasury resolved this problem in Regulations §1.48-4(b) by allowing both the lessor and lessee to be considered as original users of an item of leased property.

Our Recommendation: We believe that an "original use" definition, similar to that used in existing regulations, should be applied to qualified scientific property. In addition, for purposes of the deduction only, any "use" of the property as inventory should be disregarded.

Retention by the Donee (Prop. §174A(c)(1)(F))

The bill provides that the transferred property must not be retransferred by the recipient in exchange for money, other property, or services within five years of the date of original transfer to the recipient. Under present law (Section 170(e)(4)(B)(vi)) a similar retention requirement is provided, but for an unlimited duration. The absence of a definition of the term "transfer" in present law has resulted in speculations by commentators that leases and finance arrangments entered into by the donee with the property should not be considered transfers because they are not a sale, exchange, or other disposition. Speculations of this nature have been made, notwithstanding Regulation §1.170A-4A(b)(3), which defines language contained in Section 170(e)(3)(A)(ii) (which is identical to Section 170(e)(4)(b)(vi)) to include any "use" of the property for which money, other property or other services is received.

We believe that neither unlimited retention under present law nor the five-year retention under the bill satisfactorily accomplish an intent that the donated property be used for education and research. Instead, requiring a retention period does nothing more than encourage the donee to abandon the property or let obsolete and semi-obsolete equipment lay idle on its premises.

Our Recommendation: We propose that the bill's focus be on the actual use of the property for education and research. As we discussed earlier, the donee should be required to use the equipment for its intended purpose for at least one year. Any period longer than this would serve no purpose since, presumably, the donee is not going to dispose of nonobsolete equipment. For this purpose, the term "transfer" should be defined to either include any use of the property by an entity other than the donee or to exclude certain of such uses.

De Minimis Rule
(Prop. I.R.C. §174A(c)(1)(H))

The bill provides that except in the case of property that is computer software or replacement parts, the "value" of the property transferred must exceed $250. What does "value" equal? Is the appropriate measure for determining "value" the cost of replacing the property plus a profit to the donor (i.e., wholesale price), or the value to the donee (i.e., retail fair market value)? In other words, is this amount determined at the wholesale or retail level?

We fail to understand why donors of otherwise qualifying "equipment" or "apparatus" essential to education or research are to be denied the deduction. For example, the donation of scientific textbooks, small microscopes, and certain instruments potentially would not be eligible for the deduction because each item would have a "value" of less than $250.

Our Recommendation: We believe that the intent of this provision is to ease the administrative burdens of the deduction by setting an arbitrary *de minimis* amount. In the case in which a single item is donated this restriction has merit. When a manufacturer supplies a university with such items as 500 textbooks or 500 microscopes, however, we believe the deduction should be available.

Thus, we propose that this "de minimis rule" either not be adopted or be modified to apply to donations in the aggregate.

Warranties Accompanying the Transferred Property (Prop. I.R.C. §174A(c)(1)(I))

The bill requires transferred equipment to be accompanied by the same warranty or warranties normally provided by the manufacturer in connection with a sale of such equipment or apparatus. This requirement, however, should be applicable only to the transfer of property described in Paragraph (1) of Section 1221. Specifically, the transfer of property that is used by a manufacturer in his trade or business (as defined in Section 1231(b)) should not be required to be accompanied by a warranty simply because the taxpayer manufactures identical property for sale.

Our Recommendation: Our earlier comments have proposed that the donee be required to use the equipment for its intended purpose for at least one year. This was proposed in the context of avoiding recapture of ITC and ACRS, as well as the five-year retention period. We propose that the requirement to transfer warranties with the equipment be an alternative to the donee's one-year use of the property, since both provisions are intended to prevent the donation of obsolete and semi-obsolete equipment.

Functional and Usable Requirement (Prop. I.R.C. §174A(c)(1)(J))

The bill requires that property used in the taxpayer's trade or business (as described in Section 1231(b)) be functional and usable in the condition in which it is transferred for the purposes described in subsection (c)(1)(B), without the necessity of any repair, reconditioning, or other similar investment by the recipient. We believe the language "or other similar investment" needs clarification. For example, a transfer of equipment, whether it be state-of-the-art or otherwise, may require the recipient to make an investment in training employees to use such equipment. Under the proposed statute, is the donor required to train the donee's employees in order to be eligible for the deduction?

Qualified Services
(Prop. I.R.C. §174A(c)(2))

The bill defines qualified services to mean any standard contract between the taxpayer and recipient, in connection with any transfer of qualified scientific property, for maintenance, repair, reconditioning, or any similar services normally made available by the taxpayer to its customers in connection with the sale or lease of property of the same kind. The application of this provision to service contracts transferred in connection with property used in the taxpayer's trade or business (as described in Section 1231(b)), but which is not property of the same kind as the taxpayer's Section 1221(1) property, needs clarification. For example, a literal reading of the provision would allow a deduction to a computer manufacturer for the transfer of a standard service contract in connection with a computer used in its trade or business (as described in Section 1231(b)). If a manufacturer of widgets transferred a service contract (without consideration) in connection with a computer, however, no deduction would be allowed because the computer is not the kind of property normally sold or leased to its customers.

Our Recommendation: We believe that the deduction for qualified services should be available for any service contract transferred without consideration and in connection with any qualified scientific property.

Amount of Allowable Deduction (Prop. I.R.C. §174A(d)(3))

In determining the allowable deduction for qualified services, Proposed Section 174A(d)(3) uses the language "150 percent of the direct cost of the taxpayer in providing such services." The use of the term "direct cost" in the context of providing services seems improper. Direct cost is a cost accounting concept generic to manufacturing. Direct costs are defined as those that can be specifically identified with an asset's construction, including the cost of materials, labor, engineering, design, etc., which would not have been incurred otherwise. Indirect costs (*e.g.*, administrative, supervisory, overhead) are accumulated separately. The bill also is unclear as to whether a deduction is allowed when the service contract is transferred (using standard costs or projected costs) or as services are rendered pursuant to the contract (using actual costs).

Our Recommendation: We believe that a deduction should be allowed for the cost of providing qualified services in the year such services are actually rendered, but for purposes of the deduction, direct service costs should be defined in the statute.

STATEMENT
OF
DONALD S. MACNAUGHTON
Chairman of the Board
Of
Hospital Corporation of America

Submitted To The

Subcommittee on Taxation and Debt Management
Committee on Finance
U.S. Senate

Hearing on Private Foundations

Hospital Corporation of America (HCA) is engaged in the business of owning, operating and managing hospitals in the United States and abroad. First incorporated in 1960, HCA now owns 223 hospitals and manages 172 for other owners, for a total of 56,500 beds. HCA is a tax paying corporation and the common stock of the corporation is publicly held and is listed on the New York Stock Exchange.

As HCA has grown, its interest in philanthropic activities and its contributions to a wide variety of charities has grown. In 1983 HCA's cash corporate contributions exceeded $1.5 million. HCA hospitals made an additional $1 million in charitable contributions in each of the last two years.

Because of its desire to increase its philanthropic activities in a responsible fashion, HCA became interested several years ago in established a private foundation. As stated in the HCA Foundation's charter, the specific purposes of the foundation include important social needs such as: (1) Medical and scientific research; (2) Treatment of disease; and (3) Medical and scientific education and training. In addition, the Foundation's charter provides for making grants and contributions in the areas of the arts, human relations, civic and social improvement. As you know, many of these needs historically have been addressed by a major commitment on the part of the Federal government -- a commitment which we all know remains strong, but inevitably must be balanced against other competing Federal responsibilities during a period of increasing budgetary pressure. HCA is adhering to the very highest standards in establishing the Foundation.

We fully anticipate that the HCA Foundation will become -- in time -- a major contributor to the public good.

This worthy and ambitious project obviously will require extensive contributions and a long term dedication to these charitable goals.

HCA determined that a substantial start-up contribution would be necessary in order to firmly establish the HCA Foundation in the forefront of medical philanthropy.

However, HCA, being a publicly held corporation and owing a duty to its shareholders, believed that the transfer of many millions of dollars in cash and stock to the foundation in a single year would not be in the best interests of HCA's shareholders and probably would not be economically feasible for a corporation the size of HCA.

HCA developed an alternative contribution plan that would diminish the impact on HCA's shareholders and still assure the foundation that it would be adequately funded. Instead of giving stock all at once, HCA would grant to the foundation an option to purchase 1,000,000 shares of HCA stock. The option would be similar to the kind of stock options a corporation grants employees. Basically, the option entitles the recipient to purchase the corporate stock at a fixed price. This option could be exercised by the foundation at any time (in whole or in part) during a ten year period, at a price determined by the stock's closing price on the New York Stock Exchange on the date of the grant of the option. The value of the stock on the date of the granting of the option would be approximately $30 million. In addition, HCA would contribute cash every year to the foundation and at the end of the ten year period, the foundation would have sufficient funds to exercise the full option if it chose to do so.

As a result of this contribution plan, the foundation would be established and given the flexibility not provided by a single cash contribution or a single transfer of stock. For example, the foundation could choose not to exercise the option at all and instead utilize the accumulated funds to acquire other assets. Probably most important of all, however, the foundation could have the opportunity (if it waited until the end of the ten year period) to purchase 1,000,000 shares of HCA stock at a price frozen 10 years before.

Clearly there are substantial benefits for the foundation resulting from this contribution plan. Current tax law would permit each phase of the plan, i.e. the granting of the option and the annual donations; but perversely, current law does not permit the foundation to accept the main benefit -- the right to exercise the option.

Current law imposes an excise tax on certain transactions described as acts of "self-dealing". Among the transactions penalized is the sale or exchange of property between a private foundation and a substantial contributor to that foundation. While the law would not prohibit the corportion's initial grant of the stock option to the foundation, the statutory provisions would effectively prohibit the foundation's exercise of the option. The I.R.S. views the granting and exercise of such an option as two separate transactions, which would run afoul of the "self-dealing" rules. Actually, there is only one transaction: An offer by the corporation at the time of granting the option; and an acceptance by the foundation when it exercises the option.

Thus we have a classic "Catch-22" situation. The grant of the option is not prohibited. The annual contribution of cash to the foundation to provide it with sufficient funds to exercise the option or otherwise carry out its charitable purpose is not prohibited. But the exercise of the option is prohibited.

The blanket prohibition against certain transactions between private foundations and their substantial contributors was enacted in 1969 to replace the arms-length standard which was in effect up until that time. The problem with the arms-length standard was the difficulty in determining fair value in transactions between foundations and contributors. A number of abuses were recorded in which contributors, for their own tax advantage, either overvalued or under-valued assets that were transferred to their foundations. We agree that the abuses that existed under prior law should not be tolerated and we do not advocate or support a return to the arms-length standard.

The 1969 reforms, while broad in scope, did exempt a number of types of transactions between private foundations and their substantial contributors. The criteria for the exemptions appears to be that there would be little or no opportunity for abuse in the transactions. For example: (1) The lending of money by a disqualified person to a private foundation is not an act of self-dealing provided that the loan is without interest and the proceeds of the loan are used exclusively for charitable purposes; (2) A disqualified person may furnish goods, services, or facilities to a private foundation provided the furnishing is without charge and the goods and services are used exclusively for charitable purposes; (3) Goods and services and facilities may be provided at a cost, provided they are furnished on a basis no more favorable than available to the general public; (4) In general, a private foundation may pay reasonable compensation to a disqualified person for personal services which are reasonable and required; (5) any transaction pursuant to a liquidation, merger, or other corporate adjustment, is not an act of self-dealing if all the personal services which are reasonable and required; (5) any transaction pursuant to a liquidation, merger, or other corporate adjustment, is not an act of self-dealing if all the securities are subject to the same terms and such terms provide for receipt by the foundation of no less than fair market value; and (6) a disqualified person may lease a space to a private foundation under certain circumstances.

The key factor in all of these exempt transactions, is that the opportunity for abuse is either nonexistent or at least minimal. We propose to add another exception to the self-dealing rules which would become operative only if the transaction involves corporate securities that are regularly traded on a public exchange. The value of such securities cannot be manipulated and the market value is immediately and accurately available to anyone on a daily basis. Because of the nature and type of securities, there is no opportunity for abuse. We are not proposing nor would we support any effort to exempt from the self-dealing rules any assets that are not readily subject to accurate valuation. Moreover, the amendment proposed by HCA would not only require that the asset be securities that are easily valued but the amendment would also require that a number of other standards be satisfied before the exemption would be allowed. For example, the amendment proposed by HCA would become operative if, and only if: (1) The stock option agreement is in writing and supplied to the IRS; (2) The stock option price must be the fair market value of the stock at the time it is given; (3) the stock must be regularly traded on an exchange so that the price is set by the public market and is easily verifiable; (4) the foundation will be required to obtain an independent professional investment advisor who must certify to the IRS that the transaction is in the best interest of the foundation; (5) when the option is exercised it must be at a price no higher than the fair market value as determined by the public market price; and (6) to prevent corporate directors from controlling their corporation by transferring stock to a foundation, the amendment places a 2% limit on the amount of stock options that a private foundation may hold in any one corporation. Clearly these requirements establish a standard that is far more restrictive than the "arms-length" standard of prior law. In fact, the requirements under the HCA amendment are far more restrictive than the standards of any other exemption to the self-dealing rules.

Tax Effects

The Committee should know and understand the tax benefits and effects that passage of the HCA amendment would have on both Federal receipts and the corporate income tax deductions available to HCA. First of all it should be stressed that the HCA amendment has no revenue impact on Federal receipts. This is because HCA or any other corporation that chooses to make this type of charitable gift, will be entitled to the same total amount of tax deductions whether this amendment is passed or not.

At the time a corporation donates a stock option to a private foundation or any other charity it is not entitled to any tax deduction and the HCA amendment does not propose any change in this aspect of the law. HCA would be entitled to a tax deduction for cash contributions to the the private foundation in the same manner and to the same extent as any other corporation contributing cash to any charitable organization. Under present law a deduction is permitted, at the time a stock option is exercised, in the amount of the increase in value of the stock over the value of the stock at the time the option was granted. Under present law, any corporation, upon the exercise of a stock option by a public charity, would be entitled to this tax deduction provided the value of the stock increases. The HCA amendment would allow this tax deduction to be available to a corporation when the stock option is exercised, under very restrictive guidelines, by a private charity. That is the only change in current law that the HCA amendment requests. The amendment simply allows a corporation, under very strict controls, to execute the exact same transaction with a private foundation as any corporation may transact with a public foundation.

Moreover, the Members of the Committee should be made aware that HCA has requested and received a favorable revenue ruling from the IRS that makes it clear HCA would be entitled to the tax deduction, even without any change in current law provided the transaction was carried out indirectly. That is, if the HCA Foundation sells its option rights to another charity or group of charities (instead of exercising its option with HCA) and those charities exercise the option with HCA, the IRS has ruled that HCA would be entitled to the full charitable deduction. The only difference is that the charities, not HCA, would incur substantial transaction costs in this round-about method. These transaction costs would be monies lost to the charity. This amendment would allow HCA to do directly what the IRS has already ruled it may do indirectly -- with the benefit of the change in law going exclusively to the charity.

Conclusion

In summary, the tax deductions available to HCA if this amendment is adopted will be exactly the same as already exists under present law. HCA will receive no additional benefits and no additional deduction under this amendment. The only benefit will go to the private foundation which will not be required to expend large sums of monies on legal and accounting and brokerage fees to exercise the option indirectly.

Very simply, we are bringing a provision to your attention that we believe is more restrictive than necessary to accomplish its purpose. We believe the stock option transaction we described is free of potential for abuse and a useful procedure that can and should be utilized. We believe that this type of transaction can be utilized without a return to the abuses of the past or a raid on the Treasury. In fact, we believe this proposal is revenue neutral.

A draft of the proposed amendment is attached and made a part of this submission for the record. We believe the amendment, as drafted, is not subject to any abuse. However, if there are additional concerns, we welcome the opportunity to work with your staff in order to develop more specific language that would satisfy all interested parties.

We are requesting that this amendment be adopted by the Committee and added to an appropriate bill in order that it may be favorably reported to the full Senate.

Thank you for your consideration.

1817

THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN 48109
(313) 764-6270

HAROLD T. SHAPIRO
President

February 22, 1984

The Honorable Bob Packwood
Chairman, Subcommittee on Taxation
and Debt Management
United States Senate
259 Russell Senate Office Building
Washington, D.C. 20510

Dear Mr. Chairman and Members of the Subcommittee:

While I will be unable to attend the hearings on the Durenberger/Moynihan foundation bill (S. 1857) which you have scheduled for February 24, I am writing to urge your support for this important legislation. Strengthening the future grant capability of foundations--the central objective of S. 1857--is vitally important to colleges and universities, which as a class are leading recipients of foundation grants.

Our experience at The University of Michigan dramatically illustrates the importance of foundation grants to higher education. Foundation grants have enabled us both the launch new endeavors and to enhance the quality of our traditional education programs. For example:

- A grant from the Harry A. and Margaret D. Towsley Foundation also enabled the University to establish an Interdisciplinary Program for the Prevention of Child Abuse and Neglect in the Medical School and the Law School.

- A major grant from the James and Lynelle Holden Fund provided the cost of erecting and equipping the Perinatal Hospital for patient care, research, and medical education.

- The Andrew W. Mellon Foundation made major grants to assist in the Middle English Dictionary project and to establish a comprehensive program to improve the teaching of writing skills, the English Composition Board, in the University's College of Literature, Science, and the Arts.

- Grants from The Kresge Foundation established the University Medical School's Hearing Research Institute and provided the endowment for a faculty chair in marketing in the School of Business Administration.

- Major funding from The Bush Foundation established the University's Center for Human Growth and Development and supports its educational and research programs.

Unfortunately, the ability of foundations to make such contributions in the future is in doubt. Under current law, gifts by living donors to private foundations receive much less favorable tax treatment than gifts to other charities. This has contributed to a major decline in the "birthrate" of new grant-making foundations. In concrete terms, this means that there will be fewer of the creative, supportive relationships like that which has existed between foundations and The University of Michigan. I should add that this legislation is supported not only by colleges and universities, but by a broad and diverse group of public charities.

The Durenberger/Moynihan bill also modifies several more technical provisions of current law to eliminate needless administrative burdens on foundations. By so doing, the legislation will further increase the foundation resources available to support higher education and other charitable activities.

In sum, the Durenberger/Moynihan bill represents a major step toward ensuring the continued health of a funding source that has been a vital importance in the life of The University of Michigan and of many other charities. I strongly urge you to support it.

Sincerely,

Harold T. Shapiro

ow

THE NATIONAL ASSOCIATION OF FOUNDATIONS
A PERPETUAL NON-PROFIT CORPORATION • INCORPORATED IN 1957

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STATEMENT OF THE NATIONAL ASSOCIATION OF FOUNDATIONS, INC.

For the Hearing held on February 24, 1984, at the Senate Finance Committee Subcommittee on Taxation and Debt Management in a Joint Hearing with the Subcommittee on Savings, Pensions and Investment Policy.

Mr. Chairman, and Members of the Senate Finance Committee, The National Association of Foundations, Inc., will support the Bill, S. 1857, introduced by Hon. David Durenberger, R. of Minnesota. To amend the Internal Revenue Code of 1954 to remove certain impediments to the effective philanthropy of private foundaions. The Association is aware of the problems faced by the private foundations during the past few years. The demands for assistance have grown with each year and now come from a much wider area than was the case before the eighties. While the requests for grants made to the private foundations have increased steadily, the foundations themselves have tended to remain at or near the same level of income production and their numbers have also remained about the same. This means some new ways of coping with the increasing demands from the private sector, the traditional groups who have always looked to the private foundations for help, and now the retreat of the federal government from some of the areas which had been given over to the government in the past, now make it necessary for the private sector including the private foundations to find new ways of meeting this increasing demand on a limited amount of private resources. For that reason, the Association (NAF), will support the effort made by the Senate Finance Committee through the Bill, S. 1857, to meet some of this problem.

Inflation, a very deep recession, and strict investment policy, have all contributed to the problem. While the rest of the population can enjoy a more advanced investment policy, the private foundations must of necessity work within the frame of the prudent man rules. From time to time it is necessary to assess the practicality of the laws governing this very private foundation movement and decide what action can be taken to improve the ability of the private foundations to do the extremely worthwhile work assigned to them for the general good of the country and mankind. One of the reasons this nation has enjoyed such good fortune may be in no small measure due to the efforts of the private foundations who have, "done unto others." We are a nation under the protection of divine providence let us do nothing to change that status in the very dangerous age we live in. The work of the private foundations is vital to the continued development of the free enterprise system, capitalism, and the freedom of this great nation. The foundation movement is a private one, private individuals, private families, private property, all vital to our way of life and the American values that have made this country great.

The Association especially supports the provision for the definition of the family and the family members. This is fundimental to the private foundations and the basic form in our society. The family unit is the means through which most of the work is done. Outside of a very small number of large foundations who have public boards and hire full time staffs, the bulk of the private foundation movement is run by the basic family units who give of their personal time and wealth for the good of God and Country. This must be allowed to continue and not be subjected to the "share the wealth" attitude which has become so loud in claiming that anything tax exempt must somehow become public property! Private Foundations are Private and must remain Private Property! A man's private foundation is and should be an extension of his own personality. He should be allowed to have some pleasure from the work he does and have the money he earned go of course to a cause he believes in and not disappear into the general revenues. In defense of the private donor, America was founded on the right of private property and this is a prime example of that principle.

The National Association of Foundations, Inc., is in contact with a cross section of the private foundations and understands they are trying to keep up and comply along with the rest of the population. The fact they must operate under strict rules makes this more difficult with every passing year. The National Association of Foundations, Incorporated, supports the recommendations made in the Bill, S. 1857, and urges the Members of the Senate Finance Committee to give serious consideration to these worthwhile proposals. Because of the tax exempt status of the private foundations, they cannot lobby, engage in political activities, or propagandize, they are quite limited in the type of action permitted under the law. For that reason, the Association (NAF) appreciates the opportunity to present this statement to the Select Committee on Finance of the United States Senate.

Respectfully submitted,

Mrs. Nancy McClaskey Glasgow
President, The National Association of Foundations, Inc.

University of Notre Dame
Notre Dame, Indiana 46556

Office of the President
Cable Address "Dulac"

February 20, 1984

Honorable Bob Packwood
United States Senate
Washington, D. C.

Dear Mr. Chairman and
Members of the Committee:

While I will be unable to attend the hearings on the Durenberger/Moynihan foundation bill (S. 1857) which you have scheduled for February 24, I am writing to urge your support for this important legislation. As a member of the Rockefeller Foundation Board for over twenty years and Chairman for several of those, I can assure you that I write this with full knowledge and great concern. I have been on the Board of a number of other foundations, too, and have experienced a wide range of difficulties they face. Strengthening the future grant capability of foundations -- the central objective of S. 1857 -- is vitally important not only to the foundations, but to their recipients, particularly to colleges and universities, which as a class are leading recipients of foundation grants.

Our experience at the University of Notre Dame illustrates the importance of foundation grants to higher education. These grants have enabled us to launch many new endeavors and to enhance the quality of our traditional educational programs. For example, speaking for this University:

1. We were able to build a magnificent new Library in 1964 simply because the Ford Foundation came up with four million dollars and we were able to obtain eight million dollars in matching funds from our alumni because of the Ford grant. The new Library visibly elevated the total intellectual life at the University.

2. We inaugurated international programs during the fifties and sixties and into the seventies that resulted in the publication of over sixty fine books and an enormous number of students were educated in

international affairs. I heard one of them recently speaking Russian on national television in Moscow regarding the nuclear threat. When I asked him where he learned the Russian, he said here in this program. It was the Rockefeller Foundation initially and then the Ford Foundation that enabled us to do this high quality work.

3. A recent grant from the Helen Kellogg Foundation enabled us to inaugurate a new International Studies Program, related particularly to Latin America, with an endowment of ten million dollars.

4. A number of other foundations are responsible for over a dozen academic buildings on this campus, built in the past twenty years. Again, our academic program is immeasurably helped by the provision of these new facilities.

I could go on and on, but the evidence I cite is true of most great universities. Increasingly we have come to depend upon the foundations for the capability of doing what otherwise would have been impossible to us out of current funds.

Unfortunately, the ability of foundations to make such contributions in the future is in doubt. Under current law, gifts by living donors to private foundations receive much less favorable tax treatment than gifts to other charities. This has contributed to a major decline in the "birthrate" of new grantmaking foundations. In concrete terms, this means that there will be fewer of the creative, supportive relationships like that which has existed between foundations and the University of Notre Dame. I should add that this legislation is supported not only by colleges and universities, but by a broad and diverse group of public charities.

The Durenberger/Moynihan bill also modifies several more technical provisions of current law to eliminate needless administrative burdens on foundations. By so doing, the legislation will further increase the foundation resources available to support higher education and other charitable activities.

In sum, the Durenberger/Moynihan bill represents a major step towards insuring the continued health of a funding source that has been of vital importance in the life of this University and of many other charities. I would not only like to see this capability continue, but to grow and become enhanced by the birth of new foundations.

Many thanks for your consideration of all of these factors and hoping for the passage of the Durenberger/Moynihan bill.

Sincerely yours,

(Rev.) Theodore M. Hesburgh, C.S.C.

STATEMENT ON S. 1857

by

MATHEW H. AHMANN
ASSOCIATE DIRECTOR
NATIONAL CONFERENCE OF CATHOLIC CHARITIES

to the

SUBCOMMITTEE ON TAXATION AND DEBT MANAGEMENT
UNITED STATES SENATE COMMITTEE ON FINANCE

February 24, 1984

I am Mathew Ahmann, an Associate Director of the National Conference of Catholic Charities, on whose behalf I submit this statement in support of S. 1857 introduced by Senators Durenberger, Moynihan, Bradley and Matsunaga.

It is now widely recognized in the charitable community that while the 1969 amendments regulating private foundation philanthropy provided a sensible framework for monitoring and regulating compliance with the tax code, some aspects of those amendments have had a stultifying effect on foundation philanthropy.

In the 1981 tax amendments, the "5 percent rule" was eliminated as a barrier to the growth of foundation assets and grantmaking.

The current legislation would make some additional modifications in the law governing private foundations to render the administration of foundations by their donors and trustees, and the administration of the tax provision, more evenhanded by the Internal Revenue Service.

As a representative of the charitable independent sector, the National Conference of Catholic Charities endorses the provisions of S. 1857.

In particular, we would like to single out the proposal which would eliminate discriminatory tax treatment of lifetime gifts to foundations.

We believe that such discriminatory treatment, stemming from the 1969 act, has proved a significant deterrent in the formation of new private foundations and in the growth in size of many existing foundations.

Last fall, in the annual Presidential statement in support of United Way, President Reagan stated the important policy that government should encourage private charitable giving. We believe that the implementation of that policy is an important part of maintaining and strengthening the pluralism and diversity which provides such vitality and strength to our nation.

Consequently, we believe that measures which inhibit the growth of private philanthropy should be eliminated. The provisions of S. 1857, especially the one which would prohibit discriminatory tax treatment of lifetime gifts to foundations, are truly important for that reason, and we urge this Subcommittee and the Finance Committee as a whole to report them favorably to the Senate.

USAIR
GROUP, INC.

1911 JEFFERSON DAVIS HIGHWAY • ARLINGTON, VIRGINIA 22202

March 9, 1984

Roderick DeArment, Chief Counsel
Committee on Finance
Room SD-219
Dirksen Senate Office Building
Washington, D.C. 20510

Written Statement for Inclusion in the Printed Record
February 24, 1984 Hearing on S. 1758
Simplified Accelerated Cost Recovery System

Senate Bill 1758 is a commendable approach to simplifying complex provisions governing income taxation of corporations. It does not create "loopholes" for tax avoidance, in our opinion. Introductory statments by the sponsors indicate the Bill is about revenue neutral over a three-year transition period.

Simplification

Approximately 40 percent of the man days required for preparation of the 1983 USAir Group Federal income tax return is allocated to depreciation and gains and losses. Not only is the asset-by-asset accounting system burdensome to maintain, but it requires multiple layers of audit and review to be reasonably certain neither too much nor too little depreciation is claimed in the return. Under this bill, the work involved to accurately account for depreciation and disposals of assets would be greatly simplified.

Improved Compliance

The simplified open account system under ACRS should permit a more precise and complete audit. This system would be substantially reduce the clerical effort or extensive computer data base information now required by both the taxpayer and the tax auditor.

Revenue Neutral

So long as there is no material loss of revenue in a short-term period, such as three years, there is an urgent need to modify our tax law so that taxpayers will voluntarily comply with the Code. One of our nation's greatest exposures is the loss of the spirit of voluntary compliance by taxpayers. Senate Bill 1758 will help stem the erosion in voluntary compliance. The Bill should be adopted immediately and be effective for calendar year 1984.

Respectfully,

USAIR GROUP, INC.

W. D. Hay
Vice President - Corporate Affairs

[Whereupon, at 12:55 p.m., the hearing was concluded.]

[By direction of the chairman the following communications were made a part of the hearing record:]

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